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40 CFR Parts 9 and 300

National Oil and Hazardous Substances Pollution Contingency Plan; Final Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 9 and 300

[FRL-5028-6]

National Oil and Hazardous Substances Pollution Contingency Plan

AGENCY: U.S. **Environmental Protection Agency** (EPA).

ACTION: Final rule.

SUMMARY: In this rulemaking, the U.S. **Environmental Protection Agency** (EPA or ``the **Agency**'') is promulgating revisions to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The Oil Pollution Act of 1990 (OPA) amends existing provisions of the Clean Water Act (CWA) and creates major new authorities addressing oil and, to a lesser extent, hazardous substance spill response. The amended CWA required the President to revise the NCP to reflect these changes. The OPA specifies a number of revisions to the NCP that enhance and expand upon the current framework, standards, and procedures for response. The last revisions to the NCP were promulgated on March 8, 1990 (55 FR 8666). The proposed revisions upon which this rulemaking is based were published on October 22, 1993 (58 FR 54702). Today's revisions affect all NCP subparts except F (State Involvement in Hazardous Substance Response) and I (Administrative Record for Selection of Response Action).

EFFECTIVE DATE: October 17, 1994.

ADDRESSES: Copies of materials relevant to the rulemaking are contained in the Superfund Docket, Room M2615, U.S. **Environmental Protection Agency**, 401 M Street, SW., Washington, DC 20460. (Docket Number NCP-R2/A) This docket is available for inspection between the hours of 9:00 am and 4:00 pm, Monday through Friday, excluding federal holidays. Appointments to review the docket may be made by calling 202-260-3046. The public may copy a maximum 266 pages from any regulatory docket at no cost. If the number of pages copied exceeds 266, however, a charge of \$0.15 will be incurred for each additional page, plus a \$25.00 administrative fee. The docket will mail copies of materials to requestors who are outside the Washington, DC metropolitan area.

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SUPPLEMENTARY INFORMATION: The contents of today's preamble are listed

in the following outline:

- I. Introduction.
- II. Discussion of Selected Comments and Other Changes by Subpart.
- III. Summary of Supporting Analyses.

I. Introduction

A. Statutory Authority

Under section 311(d) of the Clean Water Act (CWA), as amended by section 4201 of the Oil Pollution Act of 1990 (OPA), Pub. L. 101-380, and pursuant to authority delegated by the President in Executive Order (E.O.) No. 12777, the U.S. **Environmental Protection Agency** (EPA), in consultation with the member agencies of the National Response Team (NRT), is today promulgating revisions to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), **40 CFR part 300**. Some of the major goals of the OPA that affect the NCP include expanding prevention and preparedness activities and enhancing response capability of the federal government.

One of the primary purposes of the NCP is to provide for efficient, coordinated, and effective action to minimize adverse impact from oil discharges and hazardous substance releases.<SUP>1 Today's revisions incorporate changes made by the OPA that have expanded federal removal authority, added responsibilities for federal On-Scene Coordinators (OSCs), and broadened coordination and preparedness planning requirements.

\\1\Throughout the NCP, ``discharge'' also includes ``substantial threat of discharge,'' and ``release'' also means ``threat of release.''

The OPA was enacted to strengthen the national response system. The OPA provides for better coordination of spill contingency planning among federal, state, and local authorities. The addition of the National Strike Force Coordination Center (NSFCC), for example, is expected to relieve equipment and personnel shortages that have interfered with response to oil spills posing particularly significant **environmental** or human health threats. Today's rule revises the NCP to implement a strongly coordinated, multi-level national response strategy. The national response strategy, contained primarily in Subparts B and D of the NCP, provides the framework for notification, communication, logistics, and responsibility for response to discharges of oil, including worst case discharges and discharges that pose a substantial threat to the public health or welfare of the United States. The amended NCP further strengthens the OSC's ability to coordinate the response on-scene and also incorporates a new OPA-mandated level of contingency planning--Area Committees and Area Contingency Plans (ACPs). These committees and plans are designed to improve coordination among the national, regional, and local planning levels and to enhance the availability of trained personnel, necessary equipment, and scientific support that may be needed to adequately address all discharges.

The major revisions to the NCP being promulgated today reflect OPA revisions to CWA section 311. These changes increase Presidential authority to direct cleanup of oil spills and hazardous substance

releases and augment preparedness and planning activities on the part of the federal government, as well as vessel and facility owners and operators. For example, revised CWA section 311(c) requires the President to direct removal actions for discharges and substantial threats of discharges posing a substantial threat to the public health or welfare of the United States. Revised section 311(d) requires a number of specific changes to the NCP, including the establishment of ``criteria and procedures to ensure immediate and effective Federal identification of, and response to, a discharge, or the threat of a discharge, that results in a substantial threat to the public health or welfare of the United States.''

Section 311(d) also mandates the establishment of procedures and standards for removing a worst case discharge of oil and for mitigating or preventing a substantial threat of such a discharge. Furthermore, this section requires the NCP to establish a fish and wildlife response plan ``for the immediate and effective **protection**, rescue, and rehabilitation of, and the minimization of risk of damage to, fish and wildlife resources and their habitat that are harmed or that may be jeopardized by a discharge.''. Section 311(d)(2)(G) authorizes consideration of ``other spill mitigating devices and substances'' for inclusion on the NCP Product Schedule, and section 311(d)(2)(L) requires the establishment of procedures for the coordination of activities of OSCs, Area Committees, U.S. Coast Guard (USCG) strike teams, and District Response Groups (DRGs).

Section 311(j)(2) of the CWA requires that a national response unit, included in today's revisions as the NSFCC, be established in Elizabeth City, North Carolina. The NSFCC ``shall compile and maintain a comprehensive computer list of spill removal resources, personnel, and equipment'' and ``shall provide technical assistance'' to OSCs. Section 311(j)(2) provides that the NSFCC will also coordinate efforts to remove worst case discharges. Pursuant to section 311(j)(3), the USCG must establish DRGs in each of the 10 USCG districts to provide ``technical assistance, equipment, and other resources'' to OSCs to assist their response activities. Pursuant to CWA section 311(d)(2)(K), OSCs must be designated for each area for which an ACP is required to be prepared.

Section 311(j)(4) addresses the development of an expanded national oil spill response planning system. Under this section, Area Committees, which are composed of qualified federal, state, and local **agency** personnel, are directed to develop ACPs that will address planning and response-related issues and concerns, including removal of worst case discharges, responsibilities of owners and operators and government agencies in removing discharges, and procedures for obtaining an expedited decision regarding the use of dispersants.

CWA section 311(j)(5) requires that the President issue regulations within two years of enactment of the OPA for owners or operators of certain vessels and facilities to prepare response plans to address, among other matters, response to a worst case discharge to the maximum extent practicable. These facility response plans are required to be consistent with the NCP and with ACPs. For onshore facilities that can cause ``significant and substantial harm'' in the event of a worst case spill, these plans must be approved by the federal government. Pursuant to E.O. 12777, EPA developed regulations that include the criteria for determining which onshore, non-transportation-related facilities are to submit response plans and which of these plans are to be reviewed and approved by EPA, requirements for the preparation of those plans, and criteria for EPA's review and approval of the submitted plans. The **Agency** promulgated these regulations on July 1, 1994 (59 FR 34070). EPA has developed a data base to track facility response plans. The

Department of Transportation (DOT) and the Department of the Interior (DOI) developed similar regulations, for offshore and transportation-related facilities, pipelines, and vessels.

B. Background of This Rulemaking

The President signed the OPA on August 18, 1990, after both houses of Congress passed the Act unanimously. After several similar proposals had been unsuccessful over the past 15 years, Congress enacted this legislation partly in response to the Exxon Valdez spill and several other incidents, including the Mega Borg and the American Trader spills.

In a Notice of Proposed Rulemaking (NPRM) published on October 22, 1993 (58 FR 54702), EPA proposed the OPA-required revisions to the NCP. A public meeting on the proposal was held in Seattle, Washington on January 14, 1994. EPA received 41 comment letters during the public comment period. A detailed Response to Comments document, providing the **Agency's** response to all comments received, is included in the Docket.

II. Discussion of Selected Comments and Other Changes by Subpart

This section of the preamble provides a subpart-by-subpart and section-by-section summary of all changes that have been made to the proposed rule published on October 22, 1993. Some of these changes have resulted from comments received; others have resulted from inter-**agency** federal workgroup deliberations, during which it was determined that additional clarification was needed.

This section also contains responses to selected comments received on the proposed revisions. In addition to responses to those comments that resulted in rule language changes, EPA has included responses to other comments that addressed ``major'' issues and those on which the **Agency** thought it was particularly important to clarify its position for the entire regulated community. Every comment received was reviewed and a response to all comments can be found in a comprehensive Response to Comments document which is included in the Docket. For a complete discussion of the proposed revisions, the majority of which are being promulgated as final regulations by this action, the reader is referred to the detailed preamble discussion in the October 22, 1993 NPRM (58 FR 54702).

Subpart A--Introduction

Section 300.3--Scope

One commenter suggested that, rather than stating in Sec. 300.3(b)(6) that the NCP provides for ``designation'' of federal trustees, it would be more appropriate to indicate that such designation occurs through E.O. 12580. EPA agrees with the commenter's point, but will substitute ``listing of'' for ``designation'' rather than modify the text to discuss designation occurring through the Executive Order, as the commenter suggests.

One commenter asked EPA to define consistency with the NCP as those actions that are not prohibited by the NCP itself or by the express instructions/directions of the federal OSC.

Consistency with the NCP is a phrase that is used in and key to liability under section 107 of the Comprehensive **Environmental** Response, Compensation, and Liability Act (CERCLA), Pub. L. 96-510, 42 U.S.C. 9601 et seq. EPA is concerned that defining consistency in the NCP itself could artificially and unnecessarily constrain **Agency** response and enforcement actions. No definition could ever be

sufficiently precise to cover all situations; each response under the NCP is unique in some way and every response scenario is unlikely to be captured by a single definition. Therefore, the recommendation has not been adopted.

Section 300.4--Abbreviations

In response to the addition of the U.S. Navy Supervisor of Salvage (SUPSALV) elsewhere in today's final rule, ``SUPSALV'' is being added to the list of abbreviations.

Section 300.5--Definitions

Many of the commenters raised definitional issues related to concerns in other subparts of the proposed rule. These issues are addressed in the context of those subparts. However, several commenters raised concerns independent of other issues, including the following:

<bullet> One commenter noted that the Federal Response Plan is identified as being signed by 27 federal departments in the preamble, and as having been signed by 25 departments in the definition of Federal Response Plan. This discrepancy was due to the fact that the Federal Response Plan was recently signed by two additional federal departments. Thus, the correct number of signatories is 27 and Sec. 300.5 has been modified accordingly.

<bullet> Three commenters asked if each village/community affiliated with an Indian or Eskimo tribe would qualify as an ``Indian tribe,'' and therefore have Regional Response Team (RRT) representation, although different villages may be of the same tribal ancestry. ``Indian tribe,'' as defined by the OPA and the NCP, excludes ``any Alaska Native regional or village corporation.''

<bullet> One commenter asked that the definition of ``Lead administrative trustee'' be made consistent with the definition in the National Oceanic and Atmospheric Administration (NOAA) damage assessment regulation to clarify between two concepts that will be used in related NOAA and USCG regulations--the lead administrative trustee and a federal lead administrative trustee. EPA agrees with the commenter; the NOAA damage assessment regulation definition for lead administrative trustee will be used in the NCP.

<bullet> One commenter recommended that the ``National response system'' be defined as being composed of two distinct entities: a planning body and a response body. Furthermore, the commenter suggested that the incident command system be the basic response structure/organization and members of the planning body would function as an integral **part** of the incident command system as opposed to a separate advisory group. EPA disagrees that the definition of the national response system should be revised as recommended to reflect ``a planning body and a response body.'' Some of the organizations referred to by the commenter--such as the NRT and the RRTs--have responsibilities related to both planning and response. The NRT, for example, has responsibilities for planning and preparedness, but also may be activated for response to oil discharges or hazardous substance releases (see Sec. 300.110). EPA has, however, clarified Figure 1 by dividing it into two figures (Figures 1a and 1b) to better illustrate the response and planning processes. In addition, EPA would like to clarify that, although the national response system meets the requirements of 29 **CFR** 1910.120 concerning the use of an incident command system, it is not the same as many of the typical incident command systems used by states, industry, and local responders. EPA has eliminated references to an incident command system in the definition

of national response system to avoid any confusion on this point. The **Agency** also has eliminated an erroneous reference to ``IRPM'' resulting from a typographical error.

<bullet> One commenter noted that the definition of ``navigable waters'' does not conform to the recently revised definition in **40 CFR 110.1**. EPA agrees that the language should be revised to be consistent with the current definition of the same term at **40 CFR 110.1**. Specifically, subparagraph (f) of the **40 CFR part 110** regulations concerning wetlands provides that ``[n]avigable waters do not include prior converted cropland'' (58 FR 45035, August 25, 1993). In this final rule, EPA has added the appropriate language to Sec. **300.5**.

<bullet> One commenter outlined a decision-tree process (using a series of yes/no questions) to clarify what is and is not ``oil.'' The process was suggested to be used instead of the proposed NCP definition. This decision-tree analysis would distinguish oil from CERCLA hazardous substances and other man-made chemicals. EPA believes that reliance on the OPA definition of oil provides the most reliable determination of what is and is not oil. The commenter's approach, therefore, has not been adopted.

<bullet> Related to the definition of oil, one commenter asked EPA to provide additional guidance regarding the classification of a spill as ``oil'' or ``hazardous substances'' and the appropriate use of the Oil Spill Liability Trust Fund (OSLTF) or CERCLA for response. Specifically, the commenter suggested addressing two issues: (1) appropriate response and funding for spills of statutorily defined ``oil'' which may exhibit, if tested, characteristics of a CERCLA ``hazardous substance'' in either its initial or weathered state; and (2) response and funding where both ``oil'' and CERCLA ``hazardous substances'' may be involved in a discharge or substantial threat of a discharge. The commenter's concerns touch on interagency policy issues that will be decided on a case-by-case basis between EPA and the USCG. The **Agency** does not wish to limit its flexibility in such matters by implementing the commenter's suggestions for revising the NCP.

<bullet> Also related to the definition of oil, one commenter argued that the treatment of animal fats and vegetable oils in the NCP is inconsistent with established regulatory principles and with available scientific data. The commenter stated that animal fats and vegetable oils are substantially less harmful to the environment than petroleum-based oils and suggested that the rulemaking be amended to differentiate between types of oils and provide for a different approach to response and removal methodologies for animal fats and vegetable oils than that required for petroleum oil. EPA disagrees that the treatment of animal fats and vegetable oils is inconsistent with established regulatory principles. The **Agency** notes that the definition of ``oil'' in the CWA includes oil of any kind, and that EPA uses this broad definition in **40 CFR part 110**, the Discharge of Oil rule. The applicability of CWA section 311 regulations to non-petroleum oils, including potentially harmful effects of animal and vegetable oil spills, has already been discussed in the 1987 rulemaking to revise **40 CFR part 110**. EPA considers certain harmful effects of non-petroleum oil discharges to be similar to those of petroleum oils, including the drowning of waterfowl, fishkills due to increased biological oxygen demand, asphyxiation of benthic life, and adverse aesthetic effects (52 FR 10718).

<bullet> Three commenters asked that the definition of ``On-Scene Coordinator (OSC)'' be changed to ``Federal On-Scene Coordinator (FOSC)'' to distinguish it from state and local OSCs. As defined, OSC means a federal official; therefore, there is no need to modify the terms as suggested or to refer to the OSC as the FOSC. Also, EPA has

revised the definition of OSC to delete the second mention of the term ``federal,'' for clarification. Finally, the word ``government'' has been added to modify the phrase ``official designated by the lead **agency**'' to clarify that the functions of the OSC cannot be delegated to non-government personnel.

<bullet> Two commenters stated that the definition of ``Removal costs'' needs to be expanded to include cost recovery for hazardous substance response incidents. The definition, taken from the statute, clearly indicates that it is limited to ``removal costs'' as defined in the OPA. Thus, it correctly relates only to oil spill response efforts.

<bullet> Noting that the OPA imposes a number of requirements on ``Tank vessels'' and ``Facilities,'' one commenter asked that these definitions be modified to exclude dedicated oil spill response vessels and temporary storage tanks. The commenter also requested that the definition of ``tank vessel'' not include temporary storage bladders (TSBs), indicating that the Customs Service recently clarified that TSBs used for oil cleanups are not ``vessels'' for purposes of the ``Jones Act.'' EPA does not believe there is a compelling reason to use a definition of ``tank vessel'' or ``facility'' in the NCP that differs from the definition in the statute. Furthermore, the **Agency** believes the commenter is raising what are fundamentally vessel and facility response plan issues more appropriately addressed in the various response plan rules.

<bullet> One commenter asked that the definition of the term ``Trustee'' be expanded to include not only foreign government officials who may pursue claims for damages, but anyone who may have a claim for damages. Section 1006 of the OPA designates trustees and describes the functions to be carried out by these trustees. That section does not envision ``anyone who may have a claim for damages'' within the range of individuals who would be designated as trustees for purposes of pursuing claims for damages to natural resources. This does not, however, preclude any individual from pursuing a claim for damages other than natural resource damages.

<bullet> One commenter recommended that EPA clarify the definition of ``Worst case discharge'' to indicate more clearly that the terms and requirements for worst case discharges apply only to discharges of oil and not to releases of hazardous substances. The CWA definition of worst case discharge (section 311(a)(24)) does not specify whether it applies to only oil or to both oil and hazardous substances regulated under the CWA. CWA section 311(d) requires the NCP to include ``procedures and standards for removing a worst case discharge of oil * * *.' CWA section 311(j)(5) requires tank vessel and facility response plans addressing worst cases discharges ``of oil or a hazardous substance.'' EPA does not want to further confuse matters by deviating from the statutory definition. The **Agency** believes it is sufficiently clear that NCP Sec. 300.324, ``Response to Worst Case Discharges,'' is limited to oil as it is contained within subpart D, ``Operational Response Phases for Oil Removal.''

<bullet> One commenter argued that the definition of ``Worst case discharge'' or ``largest foreseeable discharge'' should be based on site-specific conditions or an optional default amount based on the type of non-transportation-related facility. The commenter believes that using options will encourage installation of additional containment structures and ultimately reduce the frequency and size of facility spills. EPA has chosen to rely on the definition from the OPA, which is amenable to site-specific applications. Regarding the role of an optional default amount, the **Agency** believes that this is more appropriately addressed in vessel and facility response plan regulations.

Subpart B--Responsibility and Organization for Response

Section 300.105--General Organization Concepts

One commenter recommended that a paragraph be added describing the basic ``incident command system'' used by the federal government. The commenter suggested that this would add credibility to the NCP, because such a system has been implemented by ``the majority of progressive states and responsible parties'' and ``the more advanced districts and regions of the Coast Guard and EPA'' as the national standard for organizing spill response. Another commenter agreed and stated that this discussion should include a description of the five response functions and the federal agencies that are likely to take the lead in filling each function. Still another commenter stated that the ``unified command system'' structure: (1) Clarifies that one individual, the OSC, retains ultimate decisionmaking authority; and (2) reflects appropriate response roles for other participants such as state OSCs, responsible parties, and private contractors.<SUP>2

\2\Several comments on sections of Subpart B other than Sec. 300.105 also addressed the incident command system and the unified command. Because the response presented here encompasses the concerns raised by those comments, such comments are not presented separately in the preamble. All individual comments and responses on all sections of Subpart B, as well as other subparts, appear in their entirety in the Response to Comments document.

The commenters' recommendations emphasize the importance of clarifying the basic framework for the response management structure in the NCP. EPA agrees that the NCP should be revised to address this topic more explicitly. New subparagraphs (d) and (c) have been added to Secs. 300.105 and 300.305, respectively, and a new sentence has been added to the end of subparagraph (d) of Sec. 300.135 describing the response management structure as a system (e.g., a unified command system) that brings together the functions of the federal government, the state government, and the responsible party to achieve an effective and efficient response, where the OSC maintains authority. (The state government, at its discretion, may solicit local government involvement in this structure.) EPA would like to restate that although the goal of this structure is to reach consensus whenever possible, the OSC always retains the authority to take all actions that he or she deems appropriate. Area Committees will be responsible for developing detailed response management structures for their areas based on the broad guidelines provided in the NCP.

EPA would also like to clarify that although the national response system meets the requirements of 29 CFR 1910.120 as an incident command system, it is not one of the several systems currently in use by local fire fighters around the country and separately referred to as ``the'' traditional incident command system. Most of these other response management systems are patterned after systems developed by such organizations as the National Fire Academy and the National Interagency Fire Center. These systems were developed for operations where control of resources and personnel is placed on a single incident commander.

The emphasis during oil spill response is on coordination and cooperation, rather than on a more rigid system of command and control. The OSC, the state/local government representatives, and the

responsible party all are involved with varying degrees of responsibility, regardless of the size or severity of the incident. The OSC in every case retains the authority to direct the spill response, and must direct responses to spills that pose a substantial threat to the public health or welfare of the United States. In many situations, however, the OSC will choose to monitor the actions of the responsible party and/or state/local governments and provide support and advice where appropriate. The response management structure does not attempt to prescribe a specific item-by-item functional description of where particular organizations or individuals fit within a single response structure for a given response. Developing, adopting, and implementing a response management system, such as a unified command system, is the responsibility of the OSC and the Area Committee, through the ACP.

The response organization in an ACP must be designed to recognize two basic facts: (1) All key players in the response management structure may have job responsibilities in addition to response and preparedness, and (2) some of these responsibilities fall outside the scope of the NCP and thus would not be subject to the response structure described in the ACP.

Based on these facts, an area's response management system should recognize that key players will maintain a separate internal response management infrastructure during a response. The goal of the area's response management system is to identify how those participating in the response management structure can best communicate and coordinate with each other for planning, logistics, finance, operations, and communications to ensure effective response coordination. Because the key players differ from area to area, Area Committees must have the flexibility to tailor systems to their basic organization for the specific area. It is beyond the scope of the NCP to prescribe or endorse a particular version of incident command; to do so would be counterproductive to the very purpose of Area Committees and ACPs.

Four commenters recommended various changes to Figure 1, "National Response System Concepts." Each of these commenters stated that the responsible party should be included in Figure 1 because the responsible party, along with the federal OSC and state OSC, will operate in a triad structure in the unified command. One of the commenters stated that Figure 1 should reflect the participation of local governments and tribes on the RRT. This commenter stated that the current Figure 1 ultimately will hamper the efficiency of incident response, because it does not accurately reflect the roles of these entities. Three commenters recommended that the unified command be incorporated to more accurately illustrate the command structure. Two commenters stated specifically that the figure should be revised to show that state and local responders are accountable to the federal OSC. One commenter suggested that two new figures be added, one showing the organization for planning and preparedness, and the other showing the organization for response. The same commenter also recommended that, to minimize the complexity of the national response system, separate figures should be created for hazardous substance (CERCLA) and oil (CWA) responses. In addition, the commenter suggested consideration of separate figures for EPA's inland zone and USCG's coastal zone.

In response to concerns raised by the commenters, EPA has clarified Figure 1 depicting the national response system by dividing it into two separate figures--one for response (Figure 1a) and the other for planning (Figure 1b). These new figures illustrate a response management system (e.g., a unified command system) that brings together the functions of the Federal Government, the state government, and the responsible party to achieve an effective and efficient response, where the OSC maintains authority. EPA believes that Figure 1a illustrates clearly that the OSC always retains the authority to take all actions

that he or she deems appropriate.

Footnote 2 to Figure 1b references coordination with other existing response plans prepared under the OPA and other statutes. Information from such industry plans should be considered by Area Committees in developing and improving ACPs. This includes information that becomes available from risk management plans prepared under section 112(r) of the Clean Air Act, as well as from other federally mandated plans. EPA believes that this information not only will be useful in developing contingency plans, but that consideration of such information also will help avoid unnecessary overlap and duplication of planning requirements.

Local governments are not shown on the RRT in Figure 1b because they participate only at the discretion of the state. Indian tribes are not shown separately because they are included in the definition of the term ``State'' as used in the NCP (Sec. 300.5).

With regard to the recommendations to develop separate figures for hazardous substances and oil responses as well as for coastal zone and inland zone responses, EPA believes that the new response and preparedness figures present a useful summary of the national response system that accurately reflects all of these categories of responses. The four additional figures, therefore, are unnecessary and have not been included.

One commenter suggested including a statement regarding the Federal Government's oversight role in situations where the responsible party is responding adequately. The commenter explained that the government's response role includes oversight as well as cleanup, but that oversight appears to have been overlooked throughout the preamble and proposed rule.

Section 300.305(d) (formerly (c)) of the NCP provides that, except in a case when the OSC is required to direct the response to a discharge that may pose a substantial threat to the public health or welfare of the United States, the OSC may allow the responsible party to voluntarily and promptly perform removal actions, provided the OSC determines such actions will ensure an effective and immediate removal of the discharge or mitigation or prevention of a substantial threat of a discharge. If the responsible party does conduct the removal, the OSC shall ensure adequate surveillance over whatever actions are initiated. The **Agency** believes that this provision provides adequate guidance regarding the OSC's oversight role during responsible party removal actions. Additional detail on this topic in the NCP would unnecessarily limit the flexibility of the OSC in choosing and implementing appropriate oversight activities.

Section 300.110--National Response Team

Seven commenters expressed concern regarding the membership and responsibilities of the NRT. These commenters suggested that states, responsible parties, and cleanup contractors either be represented on the NRT or have input into response decisions.

One commenter reasoned that state representation on the NRT would increase recognition of the state role in federal response action. Other commenters noted that the decisions of the NRT affect the planning, preparedness, and, ultimately, response actions of responsible parties and that such parties have technical expertise that could be valuable in NRT meetings. One commenter believed that the proposed rule did not encourage the NRT to solicit input from stakeholders. The commenter also suggested that all workgroup meetings conducted in conjunction with NRT meetings be open to the public to encourage improved communication on planning and response issues. Another commenter recommended that cleanup contractors be included in

the decisionmaking committees and scientific support described in the NCP. This commenter reasoned that federal and state government personnel do not physically clean up spills; instead, it is the private contractors who are hired by the responsible party or government **agency** and who consequently have hands-on knowledge of and experience with state-of-the-art cleanup techniques. Two commenters suggested that, in contrast to the Area Committees, many of the RRT subcommittees are completely closed to private parties.

EPA agrees that input from states and private parties helps the NRT to function more effectively and that private party involvement with the RRTs can have the same result. States and private parties are encouraged to attend NRT meetings and in the case of private parties, RRT meetings. Those who wish to attend should contact the NRT Secretary or RRT co-chairs so that appropriate logistical arrangements can be made. In some instances, however, attendance by states or private parties may not be feasible or appropriate. For example, although the meetings of the standing RRT are open, the meetings of the RRT in executive session or as an incident-specific team are not open to private parties because this would interfere with inherently governmental functions. Specifically, attendance and participation by private parties could slow certain time-critical decisions, such as which particular federal, state or local government, or private party resources the RRT should request to respond to a discharge or release.

Section 300.115--Regional Response Teams

Three commenters believed that local governments should not be represented on the RRT because the RRT should not become overwhelmed by local representatives if it is to be effective in addressing regional issues during emergency responses. One of these commenters explained that state representatives could coordinate with local governments and communicate their issues to the RRT. Under Sec. 300.115, local governments are represented directly on the RRT by the state, and local input is coordinated through the state's representative. EPA believes this is an efficient means of local government representation on the RRT that does not impair the effectiveness of the RRT to address regional issues.

Three commenters argued that RRTs should not duplicate the planning role of the Area Committees because RRTs are not mentioned and have no statutory basis in the OPA. One of these commenters recommended that RRT members participate in Area Committees directly, rather than through the RRT. One commenter suggested that the NCP ``find a real place for the RRT within the [incident command system] structure or consider eliminating this body.'' This commenter's major concern appears to be that the RRT structure assumes one state **agency** can represent all state and local entities, but the federal government must be represented by 16 agencies. According to the commenter, this seriously undermines RRT credibility at the state and local level.

EPA believes there are several significant distinctions between the geographic responsibilities of RRTs and Area Committees that impart unique and essential functions to the two entities. Regions are envisioned to have multiple areas; in its planning and coordination role, the RRT provides oversight and consistency review for areas within a given region. This includes facilitating the process of ensuring that Area Committees within a region are mutually supportive and that links to extra-regional response concerns, considerations, and capabilities are maintained. This regional/area approach allows local area personnel to focus on specific issues such as risks, sensitive area prioritization, and response strategies that need to be tailored to a

smaller, more manageable geographic scale.

With regard to state representation on the RRT, the purpose of having a single representative is to make it possible for the state, rather than the RRT itself, to resolve intra-state disagreements. States may designate at least one alternate member to attend RRT meetings as a way to better ensure intra-state coordination, for example, between the state **agency** handling emergency response and the **environmental agency**, health **agency**, and the State Emergency Response Commission (SERC).

Two commenters stated that the role of the RRT during response should be limited to providing support to the OSC, upon request, as **part** of the unified command structure. The commenters argued that at no time should a specific RRT be given an operational role in response without placing that role in the unifying context of the incident command system.

EPA believes that the commenters' recommendation for the RRT members to provide response support to the OSC is already consistent with the current national response system, when implemented during spill cleanup operations. Although the RRT is a separate and distinct entity with clearly defined roles, this does not bar individual RRT members from being **part** of the OSC's support staff during a response. In fact, the very structure of the RRT indicates that it may be activated to supply individual members in support of response actions. The two principal components of the RRT are a standing team and an incident-specific team. The latter is formed from the standing team to support the OSC/Remedial Project Manager (RPM) when the RRT is activated for response to a specific discharge or release (see Sec. 300.115(b)).

One commenter noted that Secs. 300.115(i)(6), 300.205(c)(3), and 300.210(c)(3)(iv) reference advance planning and expedited decisionmaking for use of dispersants, surface washing agents, surface collecting agents, burning agents, bioremediation agents, or other chemical agents. The commenter suggested adding the following language, consistent with Sec. 300.310(c): ``* * * and in accordance with any applicable laws, regulations, or requirements * * *.' The recommended clarification has been made in Sec. 300.115(i)(6) of the final rule. The language in Secs. 300.205(c)(3) and 300.210(c)(3)(iv) is taken directly from the OPA and has, therefore, not been changed.

Section 300.120--On-Scene Coordinators and Remedial Project Managers: General Responsibilities

Two commenters stated that the NCP should specify minimum qualifications (education and experience) and training requirements for Federal OSCs and other response personnel. The commenters reasoned that the OSC has ultimate responsibility for the spill response effort and therefore must have sufficient knowledge, training, and skill to perform effectively and gain the confidence of the public and the response community.

EPA agrees that appropriate training enables OSCs to effectively carry out their responsibilities. In addition, the relevant Federal agencies (EPA and USCG for oil discharges) are aware of their responsibilities under the NCP and will put the best qualified OSC on the job. EPA does not agree, however, that the NCP should require lead agencies to identify minimum qualifications and training requirements for OSCs and other response personnel. The lead **agency** instead should have adequate flexibility to decide on appropriate operating procedures that, for the particular **agency**, will best ensure adequately trained

OSCs and other response personnel.

One commenter recommended that Sec. 300.120(a) explicitly state that the Federal OSC's authority is sufficient to override any otherwise applicable Federal, State, and local requirements. The commenter reasoned that compliance with all requirements may not be practicable, particularly if the requirement was established without considering the special circumstances of emergency response.

EPA does not believe that the provision suggested by the commenter--essentially preempting all Federal and State law when the OSC directs response to a discharge--is authorized by the OPA. Furthermore, adding such a provision to the NCP appears to be unnecessary. Section 311(c)(1) of the CWA, as amended by the OPA, gives the OSC authority to ``direct or monitor all Federal, State, and private actions to remove a discharge.'' The same provision also authorizes the OSC to remove or arrange for the removal of a discharge and to remove and, if necessary, destroy a vessel that is discharging. In addition, if a discharge poses a substantial threat to the public health or welfare of the United States, CWA section 311(c)(2), as amended, requires the OSC to direct all Federal, State, and private actions to remove the discharge and gives the OSC authority to carry out the other actions mentioned in section 311(c)(1) ``without regard to any other provision of law governing contracting procedures or employment of personnel by the Federal Government.''

Congress explicitly provided for limited preemption only for contracting and employment laws and this limited preemption applies only when a discharge poses a substantial threat to the public health or welfare of the United States. There is no express indication that Congress intended to preempt all Federal and State requirements with respect to other discharges.

Several commenters stated that although the Federal OSC may have authority over the responsible party, the OSC does not have authority to direct State or local **agency** actions. As mentioned above, CWA section 311(c), as amended by the OPA, provides that the OSC ``may direct or monitor all Federal, State, and private actions to remove a discharge,'' and, in the case of a substantial threat to the public health or welfare of the United States, must direct such actions. Thus, it is clear that the OSC has the authority to direct State or private actions.

With regard to local actions, the legislative history of the OPA indicates that there was no intent to exclude these from the President's authority to direct. The Conference Report states that section 201(b) of the Senate bill amended CWA section 311(d) ``to require the President to coordinate and direct all public and private cleanup efforts whenever there is a substantial threat of a pollution hazard to the public health or welfare * * *'' (emphasis added). Section 4201 of the House bill amends CWA section 311(c)(1) to authorize the President to ``direct the actions of all on-scene personnel, and monitor all removal actions'' (emphasis added). Furthermore, in discussing the new requirements to direct responses to spills that pose a substantial threat to the public health or welfare of the United States, the Conference Report states ``[t]his subsection is designed to eliminate the confusion evident in recent spills where the lack of clear delineation of command and management responsibility impeded prompt and effective response.'' (H.R. Report No. 101-653, 101st Congress, 2d Sess., at pp. 144-46.) In light of these statements from the Conference Report, Congress could not have intended that local response actions be treated any differently from Federal, State, and private response actions with regard to the President's authority to direct.

One commenter stated that Sec. 300.120(e) should indicate that the OSC coordinates, directs, and reviews the work of other agencies in contingency planning and removal. The commenter asserted that proposed Sec. 300.120 could be read to give the OSC broader responsibilities in coordination, direction, and reviewing the work of other agencies. EPA agrees that the OSC should not review the work of other agencies in activities other than contingency planning and removal. Section 300.120(e) has been revised to clarify this point.

Section 300.135--Response Operations

One commenter recommended that the federal OSC's responsibilities in a response coordinated by a state or local OSC be clarified. The commenter stated that this should help ensure that spill response actions are consistent with the NCP, regardless of whether there is a federal, state, or local OSC. The commenter indicated that it has had experience with several spills for which the federal OSC did not go on-scene and did not access the OSLTF for removal actions. The commenter suggested that this has interfered with removal activities that it deemed necessary to ensure appropriate treatment of resources for which it had trust responsibilities.

For any issues concerning a spill response, the OSC should be contacted first, whether or not the OSC is on-scene. However, it is important to note that the OSC is required to coordinate with the natural resource trustees on any removal action to be taken. If problems arise in the way these relationships are being implemented, such problems should be resolved at the area level during the Area Committee/area contingency planning process.

Another commenter objected to the requirement that the federal OSC consult with the affected trustees on the appropriate removal action to be taken if this could result in cleanup contractors missing the ``window of opportunity'' for using dispersants, burning, and containment and removal techniques to effectively address a spill.

Section 1011 of the OPA states that ``The President shall consult with the affected trustees designated under section 1006 on the appropriate removal action to be taken in connection with any discharge of oil.'' Although this responsibility has been delegated from the President to the OSC, the language to which the commenter objects is statutorily required by the OPA. In addition, the potential for delay with which the commenter is concerned will be alleviated through the preplanning that is required for the use of dispersants, burning agents, surface washing agents, surface collecting agents, bioremediation agents, and miscellaneous oil spill control agents (see Sec. 300.910). Finally, it is important to note that consultation with the trustees does not mean that the OSC must obtain the concurrence of the trustees, although such concurrence is highly desirable. Ultimately the OSC, consistent with Secs. 300.120 and 300.125, has the authority to direct response efforts and coordinate all other efforts at the scene of a discharge.

Section 300.145--Special Teams and Other Assistance Available to OSCs/RPMs

One commenter recommended that the NOAA Scientific Support Coordinator (SSC) be the primary technical advisor to the federal OSC during a spill response and be the focal point for decisions regarding ``how clean is clean.'' The commenter explained that NOAA is the federal **agency** with the greatest expertise on the fate, behavior, and effects of oil and the effectiveness of countermeasures, including

ecological considerations. The commenter concluded that with so many competing interests coming into play in a spill response, this type of decision should be based on science, and NOAA is the appropriate player to present recommendations to the federal OSC.

The NOAA SSCs and EPA's **Environmental** Response Team support the OSC on technical/scientific matters, as described in Sec. 300.145. The OSC, however, remains the ultimate decisionmaking authority for spill response. While the SSCs have considerable scientific specialization and, therefore, may be the appropriate resource to provide recommendations to the OSC on issues regarding ``how clean is clean'' during a response action, the OSC must be the focal point for making such decisions.

One commenter stated that proposed Secs. 300.5, 300.305, and 300.615, Appendix E Sections 1.5 and 5.5.2, and the preamble language accompanying Sec. 300.145 convey the inaccurate impression that trustees obtain funding to initiate a natural resource damage assessment (NRDA) and reimbursement for injuries to natural resources from the OSC. The commenter clarified that funding for initiation of NRDAs may be obtained from the OPA Emergency Fund upon application by the Federal lead administrative trustee directly to the National Pollution Funds Center (NPFC) of the Coast Guard. The OSLTF may also be used to pay for injury to natural resources. The commenter recommended that the following language be added throughout the preamble, rule, and Appendix E: ``The Federal lead administrative trustee facilitates effective and efficient communication between the OSC and the other Federal trustees during response operations and is responsible for applying to the OSC for non-monetary Federal response resources on behalf of all trustees. The Federal lead administrative trustee is also responsible for applying to the NPFC for funding for initiation of damage assessment and claims for injuries to natural resources.''

EPA agrees with the recommended revision, except for the phrase ``and claims,' ' which is an inaccurate statement of lead administrative trustee responsibilities. Thus, the requested revision, as modified, has been incorporated into the preamble, Secs. 300.305 and 300.615 of the final rule, and Section 5.5.2 of Appendix E. Language with the same intent that varies slightly from this wording has been used in Sec. 300.5 and Appendix E Section 1.5 so that the definition of lead administrative trustee conforms to the proposed NOAA damage assessment regulation (59 FR 1062, January 7, 1994) (see preamble discussion of Sec. 300.5).

One commenter recommended that specific language describing SUPSALV as a Special Team be added to Sec. 300.145. The language proposed by the commenter to be added to Sec. 300.145 as new subparagraph (d)(1) is already included in the description of the U.S. Navy in Sec. 300.175. The remaining subparagraphs, however, provide a useful description of SUPSALV as a Special Team and therefore have been added to Sec. 300.145.

Section 300.150--Worker Health and Safety

One commenter recommended that the NCP clarify the applicable Federal, State, and local roles in determining and enforcing worker training and safety requirements, particularly in the maritime environment where there is the greatest potential for overlapping jurisdiction. The commenter asserted that two agencies, USCG and the Occupational Safety and Health Administration (OSHA), potentially are charged with enforcing worker safety requirements during spill response. The commenter explained that it is essential that safety training requirements be established and clearly understood so that

appropriate training can be conducted prior to an actual spill. The commenter further stated that it is critical at the time of the spill for one individual to assume responsibility for making decisions if there is confusion or disagreement regarding worker safety, health, or training.

The OSC already is the senior official in charge of worker safety, health, and training requirements during a spill response under the NCP. The OSC is encouraged to undertake early coordination on all worker health and safety issues. Furthermore, the OSC in this capacity is required to comply with all applicable OSHA regulations. The details involved in implementing these requirements will be addressed during the Area Committee/area contingency planning process. Thus, EPA does not believe that the recommended additional language is necessary.

Section 300.155--Public Information and Community Relations

One commenter suggested that prompt, accurate information dissemination to the public should be coordinated through a Joint Information Center, an entity with functions similar to the current on-scene news office authorized by Sec. 300.155(b). The commenter explained that the current proposal addresses only federal government public relations and should be expanded to include public relations efforts of state, local, and private entities.

EPA has revised Sec. 300.155(a) to state that the OSC/RPM should coordinate with available public affairs/community relations resources to ensure that all appropriate interests are considered by establishing, as appropriate, an on-scene Joint Information Center bringing together resources from federal and state agencies and the responsible party. Experience shows that there are some situations when a Joint Information Center is essential to provide adequate coordination of information to the public from federal and state authorities during an event. In other response actions, a less formal mechanism may be adequate. In the final analysis, it is within the OSC's discretion to determine whether to establish a Joint Information Center during an event. This issue should be addressed during the area contingency planning process.

Section 300.165--OSC Reports

Two commenters questioned the appropriateness of eliminating the requirement to prepare OSC reports. One of these commenters suggested that if the requirement is eliminated, the pollution reports and log books from a major spill must be transmitted to a central repository. The commenter reasoned that records of how effectively mechanical equipment and other spill mitigating measures performed during an actual spill is precisely the type of information that should be transmitted to RRTs and Area Committees for their consideration. The other commenter stated that the final rule should clarify the purpose of this change and how EPA intends to address after action reporting and cost recovery.

The original purpose of the OSC report was to summarize activities at the site and to communicate lessons learned, discuss any problems encountered in the response, and recommend improvements that need to be shared throughout the response community. Under the NCP, even without a requirement to prepare an OSC report in every instance, the RRT or an RRT can request that an OSC/RPM submit a complete report on the removal actions taken, including the resources committed and the problems encountered. EPA has reassessed the desirability of requiring an OSC report for all responses to major discharges or releases and determined

that such a report will not be required automatically. The already considerable time demands placed on the OSC have increased dramatically with the enactment of the OPA. Preparing OSC reports is an additional paperwork burden that is not statutorily mandated. Furthermore, most important information contained in the OSC report--including lessons learned in specific responses and documentation needed for after action reporting and cost recovery--will be available from other materials prepared by the OSC, including the pollution report and the OSC log book. The pollution reports are kept in a central repository and are available to the public. Additional incentive to make this information available comes from the need to keep ACPs current and an increased need to share lessons learned. For example, the National Preparedness for Response Exercise Program (PREP) provides exercise guidelines applicable to OSCs as well as industry. Many of these guidelines can be met by aggressive evaluation of the response and lessons learned (the essence of the OSC report). Also, PREP currently is developing a proposal to establish a national data base for documenting lessons learned. Both government and industry will have access to this data base for entering data and the public will have access for retrieving data.

Section 300.170--Federal **Agency** Participation

Three commenters asked that Sec. 300.170(d) be changed to require federal agencies to report releases, rather than simply encouraging them to do so. Section 300.170(c) states that all federal agencies are responsible for reporting releases of hazardous substances from facilities or vessels under their jurisdiction or control in accordance with section 103 of CERCLA. Section 300.170(d) refers to pollutants or contaminants; it is not a requirement of federal agencies or any other organization or person to report releases of pollutants or contaminants that are not defined by CERCLA as hazardous substances. EPA agrees, however, that if a federal **agency** discharges oil in an amount above the threshold quantity as defined by 40 CFR part 110, the **agency** is required to report that discharge. Therefore, the language of Sec. 300.170(d) has been revised in the final rule to indicate that federal agencies must report discharges of oil, as required in 40 CFR part 110.

Section 300.175--Federal Agencies: Additional Responsibilities and Assistance

One commenter recommended that the NCP specify the oil discharge contingency planning responsibilities of the Department of Transportation's (DOT's) Office of Pipeline Safety, DOT's Research and Special Programs Administration, and the DOI's Minerals Management Service (MMS). The commenter explained that each of these entities has issued proposed or final regulations on response planning requirements for vessels, pipelines, and other means of transport. The commenter further recommended that the NCP incorporate a provision that the requirements of these federal agencies must be consistent.

The commenter's recommendations provide a more complete description of the contingency planning responsibilities of federal agencies under the OPA by specifying the responsibilities of DOT and MMS. Therefore, EPA has revised Sec. 300.175, as appropriate. Regarding a ``consistency requirement,'' CWA section 311(j), as amended, requires facility response plans to be consistent with ACPs. EPA does not believe, however, that this type of consistency requirement needs to be included in the NCP, because the NCP is not the appropriate forum for harmonizing the response planning requirements of various federal agencies.

One commenter suggested that proposed Sec. 300.175(b)(11)(ii) could result in resource problems, as well as potential legal and enforcement difficulties, for OSHA. The commenter believed that the proposed provision could be interpreted as requiring OSHA to develop and maintain site safety plans. The commenter was especially concerned that development and maintenance of these plans could be interpreted as approval of the plans and that such an interpretation would make it more difficult for OSHA to exercise its enforcement responsibilities. EPA has revised Sec. 300.175(b)(11)(ii) to indicate that OSHA has flexibility to provide advice and consultation on occupational safety and health issues, as appropriate for a particular response. For purposes of clarification, EPA would like to note that assistance provided by OSHA may include, to the extent practicable, reviewing and proposing improvements to site safety plans, exposure monitoring protocols, work practices, and helping with other compliance questions. These activities should be accomplished as a cooperative effort between the OSC and the OSHA representative.

One commenter suggested that the description of the National Response Center in Sec. 300.175(b)(16) be deleted because much of this information is covered in Sec. 300.125. The commenter also noted that the requirement in Sec. 300.175(b)(16) for notices of discharges to be made telephonically should apply to discharges and releases. EPA agrees and has deleted subparagraph (b)(16) of Sec. 300.175 and has revised the relevant portion of Sec. 300.125 to read ``Notice of discharges and releases must be made telephonically * * *.''

Several commenters recommended various editorial changes to the responsibilities of federal agencies in Sec. 300.175. For example, one commenter requested that the term ``Radiological Assistance Coordinating Office'' be replaced with the term ``Radiological Assistance Program Regional Office'' in Sec. 300.175(b)(5). Another commenter recommended that Sec. 300.175(b)(9)(i) be revised to add the phrase ``and other bureaus'' at the end of the description of the Fish and Wildlife Service's responsibilities. The reason for this change is that several bureaus of DOI have expertise in determining the effects of oil and hazardous substances on natural resources. EPA has incorporated these and several other editorial changes. In addition to the changes recommended by the commenters, EPA has clarified the description of its own scientific expertise by adding references to human health and ecological risk assessment and by providing information on how to access this expertise.

Section 300.180--State and Local Participation in Response

One commenter suggested that the response role of Indian tribes be included in its own section. The commenter reasoned that although many sections of the NCP treat Indian tribes as states, in reality, they are trustees for natural resources belonging to or controlled by the tribes.

Section 300.180(b) explains that Indian tribes have the opportunity to participate as **part** of the response structure, as provided in the ACP. State and Indian tribe representatives also may participate fully in all activities of the appropriate RRT.

Furthermore, Sec. 300.305 specifically defines ``states'' to include Indian tribes for purposes of the NCP, unless otherwise noted. Thus, the provisions referred to by the commenter, by definition, reflect the appropriate role of Indian tribes.

One commenter stated that the NCP should not alter the state's role and/or title for federal or state-lead response operations. The

commenter recommended that Sec. 300.180(a) be revised to read: ``This **agency** is responsible for designating the (State On-Scene Coordinator) SOSCR/RPM for federal and/or state-lead response actions, and coordinating/communicating with any other state agencies, as appropriate.'' The commenter reasoned that the NCP should provide more flexibility to honor the many ACPs that are being developed and to recognize the importance of the state in response to spills of oil or hazardous materials.

EPA generally agrees with the sentiment expressed by the commenter. The **Agency** has modified the language suggested by the commenter for inclusion in Sec. 300.180 to read as follows: ``This **agency** is responsible for designating the lead state response official for federal and/or state-lead response actions * * *.'' The reason for these modifications to the commenter's language is to provide the state with maximum flexibility in establishing a title for its lead response official, while still recognizing the important role states play in incident response.

Another commenter recommended that the NCP encourage states to enter into Memoranda of Understanding with the federal government to coordinate response-related procedures and resources. Although EPA recognizes that Memoranda of Understanding between states and the federal government to coordinate response procedures and resources may be beneficial, these arrangements can occur without being stipulated in the NCP and therefore the recommended language is unnecessary.

Section 300.185--Nongovernmental Participation

One commenter stated that the NCP should require the appropriate response role for volunteers to be mandated in ACPs. In particular, the commenter suggested that ACPs mandate that volunteers, if used, be directed by the federal OSC and that ACPs specify training requirements for each response function that volunteers are permitted to perform (e.g., clerical support, beach surveillance, logistical support, wildlife treatment). The commenter also recommended language in the NCP prohibiting the use of volunteers in circumstances that expose them to contaminants above ``permissible exposure limits.''

EPA agrees with the sentiment expressed by the commenter, in particular, the concept of using volunteers for clerical support. However, these are implementation issues that are most appropriately addressed at the area level, rather than in the NCP.

A different commenter requested that the NCP language place fewer restrictions on the use of volunteers. The commenter explained that use of volunteers should be determined by Federal and State OSCs and responsible parties through the unified command.

EPA believes that the use of volunteers should be determined by the OSC/RPM within the response management system that includes state government, local government, and the responsible party. The relevant language in Sec. 300.185 will be retained in the final rule because this allows the OSC/RPM to consider potential legal and logistical issues that may restrict the use of volunteers under certain circumstances.

Two commenters objected to the statement in proposed Sec. 300.185(a) that entities required to develop tank vessel and facility response plans should commit sufficient resources to implement the non-Worst Case Discharge aspects of those plans. One of the commenters suggested that this statement be deleted and the other commenter recommended that the term ``should'' be replaced with ``shall''.

OPA section 4202(a)(6) describes the requirement for owners and

operators of tank vessels and facilities to prepare response plans. The OPA states that these response plans must be sufficient to respond to a Worst Case Discharge, to the maximum extent practicable. However, facility and vessel response plans are also required to contain certain other provisions and information. For example, under the OPA, response plans must: (1) be consistent with the NCP and ACPs; (2) identify a qualified individual having full authority to implement removal actions; and (3) describe the training, equipment testing, periodic unannounced drills, and response actions on the vessel or at the facility.

A regulation recently promulgated by EPA at **40 CFR part 112** implements the broad OPA requirements for onshore, non-transportation-related facilities that, because of their location, ``could reasonably be expected to cause substantial harm to the environment'' as a result of discharges (59 FR 34070, July 1, 1994). Under that final rule, owners and operators of ``substantial harm facilities'' must prepare plans to respond to a Worst Case Discharge, and to small and medium discharges, as appropriate. In the preamble to the facility response plan final rule, EPA explained that the requirement to plan for several different spill sizes (not just for Worst Case Discharges) is consistent with the implementation of OPA response planning requirements by other agencies, including the USCG (see 58 FR 2358, February 5, 1993).

EPA believes that it adopted a reasonable approach in the proposed NCP revisions by indicating that commitment of resources needed to implement the non-worst case discharge provisions is discretionary, rather than mandatory, because the facility response plan rulemaking had not yet been finalized. EPA has revised the language in Sec. 300.185 of the NCP in today's rule to reflect the fact that the new requirements for facility response plans have now been finalized in **40 CFR part 112**. The most significant change is that the term ``should'' has been changed to ``shall'', as recommended by one of the commenters.

Subpart C--Planning and Preparedness--Overall Comments

Three commenters recommended taking greater measures to involve the private sector, including industry, in the planning and preparedness process and the national response system, especially in the development of the Regional Contingency Plans (RCPs) and ACPs. One of these commenters noted that existing law and regulations require facility and tank vessel owners to carry out preparedness and response activities, yet current proposed language discourages private sector input and efforts into the national response system.

EPA believes the NCP recognizes the important contribution private parties can and do make in the planning and response processes. For example, with regard to planning, private parties play an essential role in the development of local emergency response plans through their participation on Local Emergency Planning Committees (LEPCs). Nongovernmental participation in a response is encouraged in Sec. 300.185 of the NCP. Furthermore, EPA encourages private entities to participate throughout the planning process, wherever possible and appropriate.

With regard to area contingency planning, the OPA specifies that Area Committees are to be made up of personnel from federal, state, and local agencies. However, EPA strongly encourages Area Committees to solicit advice, guidance, and expertise from all appropriate sources, including facility owners and operators, cleanup contractors, and other qualified private entities. This position is consistent with the views expressed in both the EPA and USCG Federal Register notices on

area and Area Committee designations.

Two commenters believed there are instances in the proposed rule where implied responsibilities of Area Committees are not consistent with those stated in Secs. 300.205 and 300.210. The commenters stated that while Subpart C clearly establishes a planning role for Area Committees, other parts of the proposal give them a more expansive role, including training and evaluation of preparedness. The commenters argued that these roles are outside the scope of the law and not appropriate for Area Committees. EPA notes that response preparedness is an ongoing process, which requires that existing systems be tested and improved upon. The **Agency**, therefore, believes that the duties granted to the Area Committees in the NCP, such as training and evaluation of preparedness, are consistent with the OPA mandate concerning the Area Committees' responsibilities for response planning and preparedness.

In response to a number of comments that, in some way seek clarification regarding the various plans described in this subpart and their relationship to one another, EPA has prepared an additional figure (Figure 4) for inclusion in this subpart of the NCP following Sec. 300.205.

Section 300.200--General

One commenter suggested that an obvious omission from this section is any reference to the tank vessel or facility plan preparer and responsible party, and recommended that it be added to this section and throughout the NCP. EPA agrees that discussion of these plans in Subpart C would be helpful and has added new Secs. 300.205(f) and 300.211 in response to this comment.

Section 300.205--Planning and Coordination Structure

One commenter strongly urged the NCP to focus on the Area Committee as the sole regional planning body because such organizations have been functioning in an open and cooperative manner since the passage of the OPA. The commenter also argued that planning at this level (as opposed to the regional level) is much more efficient for very site-specific activities, including the identification of environmentally sensitive areas. In addition, the commenter stated, planning at this level would make it easier for states to participate, since they would not have to use limited travel funds to attend meetings at the regional level.

While the **Agency** agrees that area-level planning is critical to the effectiveness of the national response system, EPA does not believe that the area contingency planning structure precludes or supplants regional planning activities. While some local issues, such as development of certain portions of Fish and Wildlife and Sensitive Environments Plan (FWSEP) Annexes, are best handled at the area level, other planning issues, such as cross-area planning and preparedness coordination, are more appropriate for the regional level. In addition, RRTs have important response coordination responsibilities at the regional level.

One commenter believed that state participation should be expressly encouraged in the planning and coordination structure (i.e., Area Committees) of the national response system and that states should be described as full partners in the planning process. That commenter also added that the federal government's ability to enter into Memoranda of Understanding with states should be noted in the NCP. Memoranda of Understanding are a useful mechanism for clarifying response resources and minimizing potential misunderstandings or conflicts during an incident.

EPA recognizes that states and local governments are integral parts of the area-level planning process and are strongly encouraged to participate in their respective Area Committees. The **Agency** believes that this concept, grounded in the strong commitment to state and local involvement found in the OPA, is clearly reflected in the NCP preamble and rule language promulgated today. In addition, because the ACP is a product of federal, state, and local response planning coordination, the **Agency** believes that Memoranda of Understanding between the federal government and states to accomplish this coordination are unnecessary.

One commenter asked for a better explanation for determining who is qualified to sit on an Area Committee and the process for selecting and, as necessary, funding the participation of committee members. Several commenters believed that Area Committees should include the private sector or seek input and advice from private sector entities during the planning process. One commenter strongly recommended that Regional Citizens' Advisory Councils (RCACs), as well as representatives of municipal government, LEPCs, villages, and other locally elected bodies should be specifically listed as participants on Area Committees.

The OPA directs the President to appoint qualified personnel of federal, state, and local agencies to the Area Committees. Thus, the OPA does not permit private membership on Area Committees. This does not mean, however, that EPA seeks to exclude others from participating in the area contingency planning process. It is left to the discretion of the Area Committees to decide how they will integrate into this process response experts and other persons and groups with interest in and/or responsibilities for the **environmental** integrity of the area. Area Committees may establish subcommittees or workgroups as the forum for obtaining advice and guidance from such parties.

The OPA does not specify the criteria for determining who is ``qualified'' to be on Area committees. This determination is, therefore, left to the discretion of the Secretary of Transportation and the EPA Administrator. Interested parties may contact the OSC for their area, or refer to the April 24, 1992, EPA/USCG Federal Register notice (57 FR 15198) for further information concerning Area Committees and membership selection.

One commenter urged that the requirement for preauthorization planning contained in Sec. 300.210(c)(4)(ii)(D) be added to the Area Committees' responsibilities under Sec. 300.205(a)(3) and that the requirements applicable to such plans should appear in the Area Committee discussion. The commenter believed it is critical that the Area Committees conduct preauthorization planning prior to an emergency event to resolve issues of limited field data and inaccurate or uninformed opinions by interested participants.

Another commenter stated that the proposed revisions (i.e., requiring both Area Committees and RRTs to approve dispersant use) would likely discourage and impede decisions on the use of dispersants and other spill mitigating chemical agents and devices. The commenter recommended that the Area Committees take the lead on making the decision, while the RRTs serve in an advisory role.

EPA proposed revisions to Secs. 300.910 and 300.210 to require that Area Committees be actively involved in the preauthorization process and that, as **part** of their planning activities, they develop preauthorization plans that address the desirability of using appropriate products on the Product Schedule. The **Agency** believes that the language in Sec. 300.210(c)(4)(ii)(D) sufficiently addresses the Area Committees' responsibilities to provide for preapproval plans as **part** of the FWSEP Annex to the ACP. The commenter's suggested rule language is, therefore, unnecessary.

With regard to the requirement that both the Area Committee and RRT approve dispersant use, the **Agency** agrees that preauthorization of dispersants and other spill mitigating chemical agents and devices is critical to effective spill response planning. However, the OPA does not grant the Area Committee the responsibility to approve a dispersant use plan. Under the approval scheme presented in the NCP, the Area Committee serves as an advocate for the dispersant use plan, while the RRT decides if the plan is adequate and may address region-wide or cross-regional issues, thereby providing a necessary forum for dispersant use review. The **Agency** believes the two-step preapproval plan process set forth in the NCP best ensures consistent dispersant use planning while fulfilling the mandate of the OPA. It should also be noted that, for spill situations that are not addressed by the preauthorization plans, the OSC (with the concurrence of the EPA representative to the RRT and, as appropriate, the concurrence of the RRT representatives from the states with jurisdiction over the navigable waters threatened by the release or discharge, and in consultation with the DOC and DOI natural resource trustees, when practicable) may authorize the use of dispersants, surface washing agents, surface collecting agents, bioremediation agents, or miscellaneous oil spill control agents on the oil discharge, provided that the products are listed on the NCP Product Schedule.

New Sec. 300.205(f) relates to the addition of Sec. 300.211 and, along with Sec. 300.211, is discussed in response to a comment on Sec. 300.200.

New Sec. 300.205(g) was added to reference the new figure that is discussed under the earlier section ``Subpart C Overall Comments.''

Section 300.210--Federal Contingency Plans

One commenter suggested that the NCP should recognize developments that have occurred since the passage of the OPA and phase in or eliminate new requirements at variance with those developments. For example, the commenter stated, both format and substantive requirements included in the proposed rule for ACPs may not be consistent with what has been done to date, and compliance with these new requirements cannot occur overnight.

Implementation of the OPA is an ongoing process involving multiple regulations being prepared over an extended period of time. It is virtually impossible to create a current and complete ``snapshot'' of implementation efforts for these NCP revisions because implementation efforts are a dynamic process. Generally, there will be a period of time following publication in the Federal Register before new requirements take effect. Such an approach gives the regulated community time to come into compliance and should ameliorate much of the commenter's concern.

Two commenters urged that the NCP require ACPs to follow the format of the NCP and be coordinated with RCPs, indicating that close coordination and consistency would lead to more effective emergency response. While EPA agrees that cross-plan consistency is critical for effective emergency response, the **Agency** has chosen not to discuss in the NCP formatting issues that go beyond the substantive requirements mandated by the OPA, in order to retain for the Area Committees the maximum flexibility to tailor ACPs to reflect their priorities and local conditions. It should be noted, however, that Sec. 300.210(c)(2) of the NCP does refer to the importance of integrating plans, stating, ``[t]he ACP shall provide for a well coordinated response that is integrated and compatible, to the greatest extent possible, with all appropriate response plans of state, local, and non-federal entities,

and especially with Title III local emergency response plans.'' Plan consistency is an implementation responsibility of the OSC for the particular area. The RRT should be used as a vehicle to achieve consistency in implementation, as provided in Sec. 300.115(a)(2).

EPA and the USCG have chosen to build upon different features of the pre-OPA oil spill planning and response structure in preparing ACPs for the inland and the coastal zone, respectively. EPA has generally relied upon the RCPs to be used for response operations, while the USCG has relied upon local contingency plans which had been prepared for each Captain of the Port zone. Because the RCPs already include some operational elements, the initial ACPs for the inland zone have relied to some extent on augmentation of the RCP with OPA provisions, or on adaptation of RCP language into a separate ACP document. Nevertheless, some elements of the RCP, such as guidance for the development of preauthorization plans, a description of RRT activation procedures, or other regional/district-specific policies (including guidance for Area Committees within their RRT zone), are better suited for inclusion in the RCP. Other elements of the RCP, most notably, the response operations portions, are better suited to be included in ACPs.

The relationship of the various plans prepared for emergency response is illustrated in Figure 4, ``Relationship of Plans,' ' following Sec. 300.205 of today's rule. In this figure, the operations portions of the RCP are best represented by the ``Federal Agencies Internal Plans'' box.

One commenter stated that ACPs should mirror the national standards developed out of the USCG regulatory negotiation process (i.e., the process whereby the federal government and the regulated community formed a committee, discussed issues, and developed a report for use in drafting a proposed rule), because the facility response plans and vessel response plans, which are mandated under the OPA and must be consistent with the ACPs, are already being developed under the national standards. EPA notes that the national standards were developed in coordination with the vessel and facility response plan regulations and these standards are appropriate for the regulation of vessels and facilities. However, it would be inappropriate to include the national standards, which address the limited universe of regulated vessels and facilities, in the NCP, which details the broader federal response structure. The NCP must be flexible enough to encompass the implementation approaches not only of USCG, but also of EPA, MMS, and the Research and Special Programs Administration of the U.S. Department of Transportation (DOT).

Two commenters strongly urged consistency across the ACPs, noting that such consistency is particularly important for pipelines or vessels that cross states and regions and thus are subject to the requirements of numerous ACPs along the route. The commenters also believed that the existing language merely restates the law and does not provide enough information to assure such consistency, nor does the language reflect efforts underway since the passage of the OPA. One of the commenters provided three recommendations: (1) the NCP should explicitly require uniformity and consistency and provide a mechanism for resolving any inconsistencies; (2) the NRT should be responsible for ensuring consistency among the regions; and (3) procedures should be developed by which owners and operators of vessels and facilities subject to a number of ACPs may petition for resolution of any conflicts.

EPA believes that Sec. 300.115(a)(2), which gives the RRTs responsibility for providing ``guidance to Area Committees, as appropriate, to ensure interarea consistency and consistency of individual ACPs with [the] Regional Contingency Plan and [the] NCP,' '

is an adequate framework for providing coordination and consistency. RRTs have been designated as the bodies responsible for interagency and intergovernmental planning and coordination of preparedness and response actions at the regional level. The RRTs should review ACPs in carrying out this responsibility and, through their comments, encourage consistency among individual plans. In addition, the NRT should encourage consistency among regions through the issuance of guidance.

EPA disagrees that the NCP should require uniformity among ACPs. Each ACP throughout the country will have key common elements, such as the FWSEP Annexes, that will provide a consistent basis nationwide for identifying resources needing to be protected during a response. However, because the purpose of ACPs is to prepare for spill response at the area level, Area Committees must retain maximum flexibility to tailor ACPs to reflect their priorities and local conditions, concerns, and capabilities.

EPA and USCG have promulgated facility and vessel response plan rulemakings which detail the requirements placed on owners and operators for preparing those plans. These plans are required to be consistent with relevant ACPs. Finally, it should be noted that the statutory requirement for plan integration is met when the Regional Administrator (EPA) or District Commander (USCG) signs the ACP.

One commenter recommended that the USCG develop guidance to provide better standardization of requirements for ACPs. Some specific areas the commenter recommends as needing to be addressed in ACPs are detailed training requirements to cover all facets of the response (including training of volunteers) and a requirement to address the issue of site visitors and passengers on vessels used in a response.

EPA believes that the commenter's concern is better addressed as an implementation issue. OSHA already provides training requirements for spill response. Area Committees can, if they choose, determine training requirements associated with spill response activities and address any such requirements in ACPs. The NCP is not an appropriate vehicle for implementing these requirements.

To assure a timely decision on dispersant use, one commenter wanted to require it ``as soon as practically possible, but in no case more than 8 hours'' (Sec. 300.210(c)(3)(iv)). The **Agency** believes that incorporating into the NCP the suggested 8-hour timeframe for decisions on dispersant use may unnecessarily constrain flexibility for dispersant use at the area level. EPA has instead chosen to meet the OPA section 4202(a) requirement for the ACPs to ``describe the procedures to be followed for obtaining an expedited decision regarding the use of dispersants'' through preplanning. Individual Area Committees may describe additional procedures for expedited dispersant use. The commenter's concern, therefore, is best addressed at the area level.

One commenter argued that response could be expedited if ACPs expressly identified in advance those resources that will be needed in responding to large-scale spills. Specifically, the commenter stated, elements of the ``detailed description'' referenced in Sec. 300.210(c)(3)(v) should be listed in the regulatory text and include unified command requirements, health/safety/ training requirements, forward command post sites, public information resources, and interim and final waste disposal procedures.

Although EPA agrees that ACPs should provide for effective emergency response structures, the Area Committees will determine the specific details of that structure. The commenter's suggested changes are too prescriptive and therefore have not been incorporated into the final NCP. The **Agency** expects that all ACPs will be updated over time to reflect changing emergency response structures. It should also be noted that nothing in the NCP precludes the development of any response

management system, including a unified command structure, at the area level.

One commenter argued that the NCP should, at a minimum, contain a detailed description of the boundaries of the ACPs, as well as their effective dates and procedures for obtaining a copy of each ACP. The commenter suggested that ACPs be incorporated by reference in the NCP and filed with the Federal Register.

Both area boundaries and ACPs are expected to change as the national response system evolves over time. The April 24, 1992 Federal Register notice that designates the initial areas does include area boundaries and states that any changes to these boundaries will be published in the Federal Register. ACPs are available for public inspection through the EPA regions and USCG districts. These regions and districts may be contacted by telephone for more information on area boundaries and ACPs. Most ACPs are also available through the National Technical Information Service (NTIS) for the cost of reproduction. For further information, NTIS may be contacted at: 5285 Port Royal Road, Springfield, VA 22161 or by telephone at 703-487-4655.

Finally, in Sec. 300.210(c)(3), the word ``may'' has been added to qualify the statement that equipment lists are included in ``other relevant emergency plans.'' This change has been made to more accurately reflect the content of those plans.

Fish and Wildlife and Sensitive Environments Plan (FWSEP) Comments

Two commenters recommended that NOAA develop a comprehensive set of national standards for Area Committees to use in developing the FWSEP Annexes. The **Agency** believes that national standards are inappropriate for meeting the intent of the OPA. The OPA specifically requires involvement of state and local officials in the development of area plans, in **part** to incorporate local conditions, concerns, and capabilities. National standards could restrain Area Committees from tailoring the FWSEPs to reflect their priorities and local conditions. As a consequence, general guidance, rather than standards, is more appropriate and useful to the Area Committees in carrying out their responsibilities.

One commenter was concerned about the potential for duplicative monitoring activities carried out under multiple plans such as the NCP, the NRDA plan, and the FWSEP, and wanted assurances that any monitoring under the FWSEP is closely coordinated with the other plans. The commenter also requested guidance covering the extent, frequency, and duration of monitoring.

EPA notes that any response monitoring, including that detailed in FWSEP Annexes to ACPs, will be developed as **part** of the ACP process under the supervision of the OSC. NRDA activities are primarily focused on data collection and injury assessment, not monitoring. However, any monitoring conducted as **part** of the NRDA process should be coordinated with the response activities to prevent duplication of effort and effective use of resources, as stated more generally in Sec. 300.305(e) (formerly (d)). It should also be noted that the NCP does not address NRDA monitoring or assessment concerns. Further guidance is being prepared by trustee agencies on an ongoing basis to assist the Area Committees in identifying effective measures and procedures for monitoring the efficacy of removal activities and related **environmental** benefits. This guidance is focused on operational questions, not research and NRDA requirements.

One commenter was concerned about data for the FWSEPs and suggested that Area Committees should be required to analyze and review all existing data and not be permitted to generate requests for duplicative

information and requirements for new fate and effects research. The commenter also called for guidance on collecting, interpreting, and applying data to ensure consistency in use of data and to avoid the kind of problems that occur when data collected for one purpose may be inappropriately used for other purposes.

The **Agency** expects that FWSEP development will initially consist of collecting existing information about natural and human-use resources in the area from local specialists. Based upon existing information, FWSEP development would proceed from identifying to prioritizing **protection** for sensitive environments, and then selecting appropriate cleanup strategies. There is no expectation that any research necessarily will be performed; this process is based upon analyzing existing information.

One commenter was concerned that the proposed language could be interpreted as allowing Area Committees to require companies to acquire equipment for **protection**, rescue, and rehabilitation of fish, wildlife, and habitat.

The intent of Sec. 300.210(c)(4)(ii)(F) is to ensure that the ACP will identify what response capabilities will be needed to protect, rescue, and rehabilitate fish and wildlife resources and habitat and include a process for obtaining and using such resources in the event of a spill. To clarify that this is a planning function, the term ``provide'' in this section has been changed to ``plan.'' Area Committees do not have the authority to require private companies to acquire specific response resources. The OSC, however, needs to know what resources will be needed to protect, rescue, and rehabilitate fish and wildlife resources and habitat in spill response and how such resources are to be obtained and used. He or she may require use of such resources by the responsible party during spill response. This may include contracting with a federally permitted wildlife rescue and rehabilitation organization, for example. Such ``additional resources'' are called for in **40 CFR part 112**, Oil Pollution Prevention. In Appendix F to **part 112**, for example, Section 1.7.1 requires non-transportation-related facility response plans to address, as **part** of the identification and description of response resources for small, medium, and worst case spills, additional contracted help and access to additional response equipment and experts.

Another commenter recommended that ACPs cover only discharges of oil and not releases of hazardous substances and that existing language should be revised to clarify this distinction. EPA does not, at this time, require ACPs to address hazardous substance releases. Therefore, the revisions recommended by the commenter are not necessary.

Nevertheless, planning for hazardous substance releases is already addressed in the area contingency planning process, because individual Area Committees will consider planning for such releases, as appropriate. Additionally, EPA has provided for LEPCs and SERCs to have input into the area contingency planning process.

The LEPC's primary responsibility is to develop an emergency response plan for potential chemical accidents. This plan must describe: (1) Emergency response procedures; (2) methods for determining the occurrence of a release and the probable affected area and population; and (3) community and industry emergency response equipment and facilities. SERCs are responsible for supervising and coordinating the activities of the LEPCs and for reviewing local emergency response plans for chemical accidents. Thus, the LEPCs' and SERCs' expertise in planning for response to chemical releases (including releases of hazardous substances) allows the Area Committees to effectively address hazardous substance planning issues, as necessary.

One commenter expressed concern about the burden on federal **agency**

participants in developing ACPs, specifically the collection of fish and wildlife and sensitive environments information. The commenter requested clarification and specification of timeframes and expected level of effort. EPA notes that Area Committees, not facility owners, are responsible for identifying fish and wildlife resources and sensitive environments for inclusion in the ACP. However, until the geographic-specific annexes of the ACPs have been completed, the facility owners and operators remain responsible for ensuring **protection** of sensitive environments in their proximity for inclusion in their facility response plans. The guidance for determining and planning for these responsibilities on an interim basis is provided in a Federal Register notice published on March 29, 1994 (59 FR 14713) by the Department of Commerce (DOC)/NOAA. Ultimately, the Area Committee deliberations and their ACPs will provide the specific information on fish and wildlife and sensitive environments with which the facility plans must be consistent. Because the planning process should be kept as flexible as possible to allow for differences between areas, and because the area contingency planning process is iterative, it would not be appropriate for the NCP to dictate how the Area Committees should identify fish and wildlife resources and sensitive environments.

There were a number of comments regarding sensitive areas or environments. Two commenters suggested that such areas should be determined on the basis of ecological risk, noting that some areas identified as ``sensitive'' may not be ecologically sensitive, yet other areas which do not have a ``sensitive'' designation may be at risk ecologically. The commenters wanted Area Committees to consider ecological value, sensitivity to oil impact, and risk of exposure when designating sensitive areas.

The FWSEP section in the NCP was intended to provide broad, general guidance on fish and wildlife and sensitive areas. Area Committees will incorporate local conditions, concerns, and priorities into their designation and prioritization of sensitive areas. Additional guidance in the form of technical documents, such as NOAA's Shoreline Countermeasures Manual for Temperate and Tropical Coastal Environments and Guidelines for Developing Digital **Environmental** Sensitivity Indexes, have been distributed to many Area Committees. Further guidance is being prepared by trustee agencies on an ongoing basis.

Another commenter recommended including areas designated as sensitive under the Coastal Zone Management Act (CZMA) or state coastal management programs. EPA notes that CZMA-designated and/or state coastal management program areas are expected to be identified by the state representatives as **part** of development of the FWSEP Annex to the ACP.

One commenter believed that the current definition of sensitive areas was too vague and recommended that Area Committees be required to identify and delineate these areas on a map. This commenter also called for more specific guidance on defining ``sensitive areas,'' giving as examples the need for a clear explanation of such terms as ``wetland,'' ``various state lands,'' and ``biological resource area.''

The definition of sensitive areas, as described in the NCP and in NOAA's Federal Register notice (59 FR 14713, March 29, 1994), are only broad in the sense that they are not prohibitive. The documents that are referenced for further information in that notice are cited only to the extent that they are considered for identification of sensitive areas and are not cited to limit response action selection, but rather to focus the deliberations on sensitive areas. National guidance has identified key components that should be considered when determining environments sensitive to oil impacts which should facilitate consistency in Area Committee approach.

However, it is important that the Area Committees determine what is

important for their area, incorporating local factors and priorities. It is the Area Committees' responsibility to determine and rank sensitive environments within their jurisdiction for the purposes of **protection** priorities and cleanup measure selection as related to spills. This may or may not include areas specifically identified by other statutes as ``sensitive'' for other purposes. Although some Area Committees are making use of maps to delineate fish and wildlife and sensitive environments, it is not specified by statute. This implementation issue is left up to the Area Committees.

Yet another commenter urged that determinations of sensitive areas be extremely specific and have a clear scientific basis, and that each Area Committee develop a single prioritization list. The **Agency** restates that the guidance offered to the Area Committees is intentionally broad to allow the committees to incorporate local values and priorities (as per Sec. 300.210(c)(4)(ii)(A)). ``Wetlands'' are referenced in the EPA final rule at **40 CFR part 112** as areas that may be ``fish and wildlife and sensitive environments.'' Thus, Area Committees may identify in the ACP particular wetlands in their area as and wildlife and sensitive environments. Identification of sensitive areas, however, is only the first step; ranking areas to be protected is the second step, which will force discussion of those areas which can be reasonably expected to be protected in comparison to other areas of ``special economic or **environmental** importance that might be damaged by a discharge.''

One commenter provided language and recommendations regarding preapproval for specific countermeasures or removal actions as provided in proposed Sec. 300.210(c)(4)(ii)(D), stating that plans should: (1) require concurrence by EPA, state(s), and natural resource trustees; (2) address specific contexts in which the countermeasures should and should not be used; and (3) discuss certain factors such as potential sources and types of oil, sensitive areas, available product and storage locations, available equipment and trained operators, and means for monitoring application and effectiveness. The commenter also recommended expanding the characterization of ``sensitive areas'' to include areas of special economic or **environmental** importance--not just fish and wildlife resources or habitat.

The requirements for obtaining preapproval for use of specific dispersants and other chemical countermeasures is covered in Subpart J of the NCP. Repeating the state and EPA role in preapproval plans in the FWSEP is unnecessary. Language regarding trustee concurrence in preapproval plans for chemical countermeasures is included in Sec. 300.210(c)(4)(ii)(D) to meet the intent of section 1011 of the OPA, that there shall be consultation with ``the affected trustees * * * on the appropriate removal action to be taken in connection with any discharge of oil.'' Trustee concurrence is more appropriate than consultation during the contingency planning phase, when there is sufficient time to identify and resolve natural resource concerns. The requirement for concurrence during the advance planning phase will ensure trustee involvement in decisionmaking. This, in turn, should ensure that operations during a removal action can be carried out quickly and effectively because concerns that might otherwise slow the action will have been addressed in advance. Conditioning the consultation requirement by adding the term ``appropriate,'' as requested by the commenter, would not meet this legal requirement.

Regarding the specific factors relating to the use of countermeasures that the commenter requested be addressed in the FWSEP, nearly all of the recommended language already appears in Subpart J, Sec. 300.910(a); the rest is already in other parts of Subpart C and **agency** guidance. Again, it is not the intent of the FWSEP to repeat

other sections of the NCP, in this case, Subpart J, although Sec. 300.210(c)(4)(ii)(D) specifically references these Subpart J requirements. The FWSEP is a tool to focus the Area Committee on specific issues and offers flexible guidelines that will help protect fish and wildlife, their habitat, and sensitive environments during discharges and releases.

The clarification this commenter also requested regarding the characterization of ``sensitive areas'' is not necessary because Sec. 300.210(c)(3)(i) already states that the ACP shall include these areas. Language in the preamble to the proposed rule offered several examples of economic and **environmental** areas that might be included in the annex to the ACP. The Area Committee has the information required to evaluate properly any areas considered for designation in the ACP. The NCP provides broad guidelines, so the Area Committee has the flexibility to evaluate and identify these potential areas of importance in the development of the ACP. This flexibility permits the Area Committee to create an area-specific plan that provides for ``immediate and effective **protection**, rescue, and rehabilitation of, and the minimization of risk of damage to, fish and wildlife resources and their habitat,'' in addition to any other areas of special economic or **environmental** importance which they have identified for inclusion in the annex to the ACP.

Two other commenters argued that state trustees, not just federal natural resource trustees, should be asked for concurrence on countermeasure approval. EPA notes that the state representative to the RRT, the body which has the responsibility for pre-approval for specific countermeasures, represents all the interests of the state and is the conduit for state concurrence.

One commenter suggested that proposed Sec. 300.210(c)(4)(ii)(G) be amended to include the provision of ``other related fish and wildlife permits or emergency permits to facilitate response related activities'' as well as procedures regarding ``all response and response training-related activities that could be construed to be a taking, or involving'' the capture, transport, rehabilitation, or release of wildlife.

EPA notes that, as written, the referenced section covers the fish and wildlife permits necessary for response-related activities, as identified by the agencies responsible for overseeing possession and handling of fish and wildlife. This section calls for the ACP to ``provide guidance on the implementation of law enforcement requirements included under current federal and state laws and corresponding regulations.'' Permits other than those covered in subparagraph (G) must be addressed on a case-by-case basis. Permits are issued for the purpose of handling and rehabilitating wildlife threatened or injured during a response, not to give preauthorization for the potential ``taking'' of wildlife during response activities or response-related training. Usually, natural resource law enforcement agents are on-scene or readily accessible for requests for other permits in the event of unusual response activities that might require authorization.

Finally, in Sec. 300.210(c)(4)(ii)(F), EPA has indicated that planning for **protection**, rescue, and rehabilitation of fish and wildlife resources and habitat does not interfere with other OSC removal operations. The reason for adding the word ``other'' is to clarify that fish and wildlife planning activities are **part** of the OSC's removal operations.

Section 300.211--OPA Facility and Vessel Response Plans

See discussion under Sec. 300.200.

Section 300.212--Area Response Drills

Seven commenters believed that the NCP should acknowledge and reference the proposed ``National Preparedness for Response Exercise Program (NPREP or PREP)'' and make sure that NCP language is consistent with these proposed guidelines. Two commenters stated it was imperative that the NCP not create any additional requirements with regard to exercises beyond those contained in PREP.

The **Agency** notes that the development of the PREP proposal creates a method for facility owners and operators and Area Committees to satisfy all OPA drill/exercise requirements. At the same time, the language in the NCP is merely attempting to reflect a new CWA requirement for periodic area response drills. EPA recognizes that PREP represents a comprehensive approach to response exercises and that compliance with the PREP guidelines to conduct drills will be considered adequate to meet the NCP requirements. However, although PREP represents one method for meeting the drill/exercise requirements in the OPA, it cannot replace the relevant NCP provisions because PREP is voluntary rather than mandatory.

One commenter believed that the cost of area exercises should be borne by the OSLTF. Currently, OSLTF funds are not available to pay for area exercises. When Congress established the OPA, it authorized the various agencies with responsibility for pollution preparedness and response to spend funds to support participation in the national response system. Congress did not, however, appropriate the funds to do so. For the OSLTF to be used for exercises, Congress would have had to appropriate money for this specific use. In the absence of this appropriation, the various agencies are responsible for providing the funds from within their organizations.

Section 300.215--Title III Local Emergency Response Plans

Two commenters believed that this section should require consistency of Title III plans with the NCP, RCPs, ACPs, and state plans, indicating that it is critical for functions to be consistent at all levels of planning. EPA recognizes the importance of coordinating local emergency response plans developed by LEPCs and other contingency planning efforts. The current NCP requires that OSCs preparing plans coordinate with LEPCs. In addition, RRTs are responsible for providing regional consistency (Sec. 300.115(a)(2)).

OPA has added specified requirements for facilities to prepare contingency plans as well as for Area Committees, under the direction of an OSC, to prepare ACPs. The coordination requirements pursuant to the Superfund Amendments and Reauthorization Act Title III and those already in the NCP are now augmented by the need to include coordination with the many new plans being developed under OPA. RRTs are now responsible--through RCPs--to coordinate area planning (for example, to ensure that pipelines crossing through several areas are not subject to disparate requirements). Finally, the NRT--through the NCP--coordinates the entire national response system.

ACPs should be coordinated with and, to the extent possible, be consistent with LEPC plans and facility response plans under OPA. Of course, LEPC plans and ACPs should recognize the role of the federal government during emergency response, as described in the NCP.

Subpart D--Operational Response Phases for Oil Removal

Section 300.305--Phase II--Preliminary Assessment and Initiation of Action

Several commenters sought clarification of the role/responsibility of the responsible party to undertake a response action in the first instance. Some commenters thought the language in Sec. 300.305(c) was misleading when it says the OSC may allow the responsible party to perform removal actions. Rather, these commenters suggest the responsible party must be required/given the opportunity to immediately undertake containment, control, and cleanup. One commenter noted that most responsible parties already have contingency plans in place and have the training and expertise necessary to respond immediately and effectively. The commenter also suggested that the final rule should be clear that if the OSC delegates to the responsible party the duty to respond to the discharge in accordance with the NCP, then the responsible party, as the agent of the OSC, should have the same authority as the OSC to access the spill site to conduct the removal without interference from other authorities.

As stated in the preamble to the proposed rule, the NCP had provided that the OSC must make reasonable efforts to have the responsible party take proper response actions. The proposed revision retained as an option the possibility of allowing the responsible party to take the lead where the OSC determines this approach will result in immediate and effective response action. The reason for this change is that under the amended CWA, it is clear that the OSC, rather than the responsible party, determines the appropriate course of action for response. Even with this change, however, the responsible party is not absolved from responsibility for taking whatever actions are necessary immediately upon discovery of a spill until such time as the OSC is notified and able to determine the appropriate course of action.

As to the commenter's concerns regarding the scope of authority of the responsible party when undertaking a response, the OSC does not ``delegate'' response authority to the responsible party. Rather, the OSC determines whether the responsible party is capable of carrying out fully effective response measures. If the OSC determines that such capability exists, he or she can permit responsible party cleanup to occur and simply provide surveillance over whatever actions are initiated. The responsible party is not the ``agent'' of the OSC, and EPA does not provide to the responsible party the authority granted to the OSC to access the site for response purposes.

One commenter suggested that the NCP needs to recognize that direction of responsible party contractors will occur through the responsible party. The commenter stated that those contractors are at financial risk if they take direction directly from the OSC, and filing a claim against the OSLTF is not an adequate remedy because of delays and uncertainty in recovering those costs.

EPA notes that OPA section 4201 clearly states that the President (delegated to the OSC) is given the authority to ``direct or monitor all Federal, State, and private action to remove a discharge.'' It is the obligation of the responsible parties and their cleanup contractors to establish a contractual relationship that provides for appropriate rights and **protection** for both parties, including a cleanup scenario where the OSC directs all private party action. Also, ACPs and facility response plans may address aspects of this relationship and how it will work when the OSC directs the response; the NCP is not the appropriate place to address such relations.

Two commenters suggested that, contrary to proposed language in Sec. 300.305(c), the OSC lacks authority to direct state and local **agency** actions, but rather should/must coordinate with these parties

through the unified command system. However, the language to which the commenters objected, that the OSC ``may direct or monitor all Federal, State, and private actions to remove a discharge'' is taken directly from CWA section 311(c), as amended by the OPA. Thus, EPA disagrees that the OSC does not have the authority to direct state, local, or private actions.

Two commenters stated that when there is an immediate threat to the public health and safety, the local on-scene coordinator (fire chief, emergency manager) should serve as the incident commander. This is consistent with EPA's view of how the response management system should work. As noted in the preamble to the proposed rule, ``the individual in charge of an incident command system is the senior official responding to the incident; for the national response system, this individual is the OSC.'' At some incidents there may be a period of time before which the OSC is in place to take charge of the response. In such cases, it is appropriate for the senior individual who is on site, such as the fire chief, to take charge (temporarily) as the incident commander. Of course, the OSC always retains the authority to choose to direct any portion of the spill response.

Another commenter suggested that inclusion of the unified command concept would clarify that a state is not at liberty to impose more stringent measures when a federal OSC is directing the response. EPA disagrees with the commenter's view that a state could initiate more stringent measures than the OSC when the latter is directing the response. When directing a response, the OSC is more than managing the response. He or she has specific legal authority to guide the activities of all parties responding to a discharge, and all actions would have to be authorized or approved by the OSC.

In addition, under OPA section 1011, in all cases it is the President (delegated to the OSC) in consultation with governors of affected states who determines when removal shall be considered complete. At the same time, however, section 1011 states that a determination that federal removal action is complete ``shall not preclude additional removal actions under applicable State law.''

Numerous commenters thought the term ``direct'' needed greater explanation or definition. It was suggested that doing so would clarify the flexibility (range of authority) of the OSC in directing a response and the differences between ``directing'' actions in the case of substantial threats and other cleanup scenarios. One commenter suggested that discussion of the OSC's choice to monitor a response needed expansion, specifically to indicate that states or persons other than the responsible party could be permitted to undertake a removal action (provided it would be immediate and effective).

The emphasis during oil spill response is on coordination and cooperation, rather than on a more rigid system of command and control. The OSC, the state/local government representatives, and the responsible party all are involved with varying degrees of responsibility, regardless of the size or severity of the incident. The OSC in every case retains the authority to direct the spill response, and must direct responses to spills that pose a substantial threat to the public health or welfare of the United States. In many situations, however, the OSC will choose to monitor the actions of the responsible party and/or state/local governments and provide support and advice where appropriate. The response management structure does not and cannot attempt to prescribe a specific item-by-item functional description of where particular organizations or individuals fit within a single response structure for a given response. Developing, adopting, and implementing a response management system, such as a unified command system, is the responsibility of the OSC and the Area Committee, through the ACP.

One commenter suggested that the OSC should expeditiously declare the government's elective decision to direct a response, not only declare it in those cases where the OSC is required to direct (as provided in proposed Sec. 300.305(c)(2)). The commenter argued that participants in a response need to clearly understand the nature of the federal role and that this change would help minimize confusion over who is the ultimate decisionmaker, avoid ambiguity in planning and implementation of response strategies, and foster consistency in decisionmaking.

EPA does not agree with this commenter's proposal because it could unnecessarily constrain the flexibility of the OSC. In those cases where OSC direction is discretionary, there may be expectations that by not declaring expeditiously that he or she will direct the response, the OSC has foregone any opportunity to ever do so. EPA believes that it would be counterproductive to put pressures on OSCs to make decisions prematurely or to create expectations among other parties that a situation is not subject to change, regardless of future events.

One commenter suggested that trustees and others are increasingly involved in the response process, including decisionmaking, and suggested that this involvement decreases the timeliness and effectiveness of response efforts. Related to this, the commenter cites legal concerns that often polarize government and responsible party responders during major spills, and suggests that separating the damage assessment phase in both time and **agency** would promote cooperation and free exchange of information.

With regard to the commenter's concern over an increase in the number of entities with actual or perceived roles in decisionmaking, the **Agency** notes that section 1011 of the OPA requires consultation with affected trustees on the appropriate removal action to be taken in connection with any discharge of oil. EPA's intention is that this consultation will take place in large **part** during the area contingency planning process. In terms of information exchange among parties involved in a response, EPA wholeheartedly supports the notion that there should be nothing to impede cooperation and free exchange of information to expedite the response activities. Information should, to the maximum extent possible, flow freely between those agencies involved in the response and those involved in the damage assessment. In addition, it is important that the activities of the two groups be closely coordinated, as intended by Secs. 300.305(e) (formerly (d)) and 300.615(c)(3)(ii). In today's final rule, language is added to these two sections to reinforce the point that information collected for damage assessment which is supportive of the response phase should be made immediately available to the OSC to support his or her decisions. This information flow will most likely occur through the SSC who serves on the OSC's staff as the interface with the trustees.

Two commenters suggested that although proposed Sec. 300.305(d) (now (e)) indicates the lead administrative trustee will act on behalf of all trustees, this is not necessarily the case nor is it acceptable to the states under all conditions. Related to this, one commenter stated that the preamble language concerning the USCG's future regulations that will detail the lead administrative trustee's authority to access federal response resources on behalf of all trustees is confusing. The commenter suggested that, as written, it is unclear whether this statement refers to funding for initiation of damage assessments or trustee access to OSC airplanes, vessels, etc. The commenter believed the intent was to cover the former and recommends that language be added to the NCP to that effect. EPA believes the commenter is correct. The regulations in question will address trustee access to the OSLTF. It should be noted, however, that

there may be situations where the OSC provides non-financial resources to trustees to carry out their NRDA and related responsibilities. The language of Sec. 300.305(e) (formerly (d)) is being revised to clarify that the ``response resources'' referred to are non-monetary resources, i.e. personnel and equipment. This is the only action taken by the lead administrative trustee on behalf of all trustees that is called for in this section of the rule. Providing a single point of contact between the trustees involved in initiation and the OSC should facilitate trustee access to response equipment and personnel by ensuring that all trustee needs are communicated to the OSC in a coordinated manner.

One commenter stated that the proposed NCP is structured in a way that does not ensure integration with facility response plans. EPA believes that the commenter's concern about integrating facility planning efforts are misdirected towards the NCP. It is the area contingency planning process where preparedness planning on the **part** of specific facilities within the area should be accounted for. The ACPs can then be implemented in such a way as to take advantage of all available resources.

Section 300.310--Phase III--Containment, Countermeasures, Cleanup, and Disposal

One commenter urged that the NCP expressly recognize OSC authority to permit the return of oil or oily water incidental to mechanical recovery operations back into the response area. EPA believes this practice is currently recognized as a routine and necessary **part** of response operations under certain circumstances. The appropriate role of such action should be addressed as **part** of the area contingency planning process. It would be inappropriate for the NCP to address this in any sort of across-the-board manner.

The same commenter believed that the NCP should clearly identify the requirements that apply to waste management in an oil spill response. EPA believes this issue should be left to RRT and ACP guidelines and other statutes and regulations. These requirements may change over time and are not appropriate for inclusion in the NCP. Section 300.310(c) has been expanded from the 1990 NCP to provide guidance on how RRT and ACP guidelines might address disposal plans for oil spill response and certain rule language changes are being made in today's final rule to clarify some of the specific issues RRTs and Area Committees may wish to address.

Section 300.317--National Response Priorities

Two commenters strongly supported the adoption of the following as national response priorities: (1) protect human life and safety; (2) minimize **environmental** impacts; and (3) minimize social and economic impacts. Three advantages are cited for these proposed priorities: first, area planners would necessarily consider the ecological, social, and economic consequences of their recommendations in their plans; second, these priorities would provide a framework for the OSC to prioritize limited resources during an emergency; and finally, spill response decisionmaking would be streamlined because many decisions could be made during the contingency planning process. These commenters argued that existing priorities do not give involved parties adequate guidance regarding the **protection** of **environmental** resources. The commenters did not find fault with the first two priorities proposed in the NCP, but argued that the third one (coordinated use of containment and removal efforts) does not help responders allocate resources when there are conflicts between aesthetic and ecological goals. They

emphasized that setting priorities that put ecologically sensitive and important areas first is essential. One commenter suggested supplementing the priorities proposed in the NCP with those normally followed by response contractors: (1) provide for health and safety of your workers and the public; (2) stay in compliance with state and federal regulations, including minimizing exposure to liability; and (3) protect the environment and clean up or remediate spills and releases.

As noted in Sec. 300.317(e), "[t]he priorities set forth in this section are broad in nature, and should not be interpreted to preclude the consideration of other priorities that may arise on a site-specific basis." The preamble to the proposed revisions notes that the response priorities "are not intended to restrict the discretion of the OSC in directing or monitoring responses to oil discharges." The response priorities noted by the first two commenters reflect important concerns that should be considered under the appropriate circumstances. EPA believes it is in the area contingency planning process that additional priorities should be established for subsequent application on a site-specific basis. Also, EPA believes the specific priorities cited by the last commenter are actually more appropriate for facility and vessel response plans than for the NCP or even ACPs.

Two commenters argued for inclusion in the NCP of language comparable to language in the International Convention for the Prevention of Pollution from Ships (MARPOL) and USCG MARPOL regulations. Specifically, the suggested language indicates that jettisoning oil or hazardous substances is a viable option for ship masters and salvagers, if doing so may decrease the risk of loss of life or serious injuries, prevent the discharge of greater amounts of oil or hazardous substances, or prevent more serious **environmental** consequences than the jettison itself. Related to this, one commenter suggested that the NCP needs to be clarified to indicate that salvagers are "persons" under the CWA and not liable for removal costs or damages that result from certain actions taken.

EPA does not believe there is any reason that the term "person" would be interpreted to exclude salvagers. It would be superfluous to include such language and would encourage requests from others engaged in spill response that the regulation afford them **protection** as well.

The OSC currently has authority to permit jettisoning to save the vessel or its crew or to prevent more serious **environmental** damage. Moreover, the discharge of oil or oily mixture into the navigable waters for purposes of securing the safety of a ship or saving life at sea is already authorized under Regulation 11 of the MARPOL protocol, current U.S. law, and USCG regulations (33 **CFR part** 151).

Section 300.320--General Pattern of Response

One commenter suggested that Sec. 300.320(a)(2)(i) appears to require notification of trustees only in the event of an actual or potential major discharge, which is contrary to the requirements of Sec. 300.305(d). EPA notes that, although Sec. 300.320(a)(2)(i) does not say that the OSC needs to notify the trustees only of major discharges, the language may be misleading. It has been revised to reflect the commenter's concern.

Several commenters expressed concern with Sec. 300.320(a)(3)(i), which provides the standard that the OSC will use to determine whether the responsible party is conducting removal actions "properly." First, they argue that it describes a standard that is unrealistic and overly broad; responsible parties should only be responsible for applying available resources in a manner designed to effectively and immediately remove or mitigate the spill to the maximum extent

practicable. Second, the commenters believe that a decision to use Federal resources should not cause a responsible party's efforts to be necessarily deemed ``improper.'' They argue that the OPA intended private and government resources to work together and the government may have some resources simply not available to private parties. The commenters therefore concluded that the provision in question creates a disincentive to the use of these (government) resources.

Section 311(c)(1) of the revised CWA requires the President to ``ensure effective and immediate removal of a discharge'' in accordance with the NCP. This authority has since been delegated to the OSC. Because the OSC is required to ensure effective and immediate removal of a discharge, he or she must use this test as the standard for determining whether the responsible party removal action is being done properly.

In addition, the authority given by the OPA to the OSC for setting the course of response action has repercussions for the determination of whether a private party spill response is ``proper.'' Under Sec. 300.320(a)(3)(i) of the 1990 NCP, private party removal efforts were deemed improper ``to the extent that Federal efforts were necessary to minimize further or mitigate threats to public health and welfare and the environment.'' However, the **Agency** understands that this section of the NCP may unnecessarily restrict the OSC's ability to determine whether a private party response is ``proper,'' given the more flexible response approach detailed in the OPA. In certain instances, the Federal Government may have response resources that are not available or promptly available from other sources--the USCG's special equipment for removal and salvage operations, for example--that could aid in spill response. The **Agency** agrees that the use of these resources should not necessarily determine that a responsible party response is ``improper.'' EPA has therefore modified the language of Sec. 300.320(a)(3)(i). Section 300.320(a)(3)(ii) also has been modified to indicate that, if the OSC supplements responsible party resources with government or other private resources, the responsible party response will not be deemed improper unless specifically declared so by the OSC. The OSC may declare that a private party response is ``improper'' if he or she determines that the cleanup is not fully sufficient to effectively and immediately remove threats to the public health and welfare and the environment.

One commenter suggested that the NCP (in conjunction with other regulations, see, for example, 58 FR 7425, 33 **CFR** 155.1020 that discusses worst case, maximum most probable, and average most probable discharges) contains a multitude of discharge classifications with attendant consequences for each category that is overly complex, confusing, and unnecessary. With regard to the NCP, the commenter cites discharges classified by size (major, medium, and minor), by category (worst case discharge and spills of national significance (SONS)), and by nature of the threat (those discharges posing a ``substantial'' threat). The commenter goes on to suggest that it is more important at the time of a spill to characterize the spill by the level of desired response rather than the actual amount of oil that is in the water, and that rapidly determining the amount of oil spilled may not be possible in many cases. The commenter recommends deletion of most discharge classifications that do not have a statutory basis. In particular, the commenter suggests that the major-medium-minor distinction for classifying spills has outlived its usefulness, and that operational demands of the response should dictate what level of coordination occurs and what resources are requested by the OSC.

The **Agency** notes that the proposed revisions to the NCP built upon the spill classification system in place prior to passage of the OPA.

New statutory requirements, as well as SONS were added. EPA believes each of the different elements of this revised system are important to different parties and for different purposes. Taken as a whole, the revised system provides a combination of approaches to developing the appropriate spill response. It retains approaches that are known and understood in the response community, permits existing tracking and recordkeeping mechanisms to remain in effect, and effectively implements new OPA mandates. In large **part**, this system supports planning and other non-response activities. The classification system itself does not pre-determine the full range of actions that could be taken in response to a spill. No further revisions are being made at this time.

One commenter stated that the OSC should be required to designate the response area as soon as possible after an oil spill event to clearly define the limits of the response area because the vessel response plan requirements state that the OSC will designate as the response area that area in which spill response activities are occurring. EPA believes that implementation of this commenter's recommendation would unnecessarily constrain decisionmaking by the OSC during the full course of an incident. As conditions change, the response area may change. In addition, the commenter's concerns presumably revolve around implementation of vessel and facility response plans and carrying out activities in ``the response area'' versus outside the area. This issue should be discussed with the OSC on a case-by-case basis and is not appropriate for inclusion in the NCP.

One commenter stated that Sec. 300.320, which suggests that notification of states is a function of the size of a spill, is inconsistent with Sec. 300.300(d) which requires that the OSC ensure that the appropriate **agency** of a state affected by a spill be notified. EPA has revised this section to make it clearly consistent with Sec. 300.300(d).

Section 300.322--Response to Substantial Threats to Public Health or Welfare of the United States

In order to clarify the latitude given to OSCs to determine which spills pose ``substantial threats,''' several commenters recommended that the sentence found in the preamble, ``most discharges are not expected to be identified by the OSCs as substantial threats to public health or welfare of the United States,''' be added to the rule language of this section. EPA believes that the language provided on substantial threat discharges in the preamble to the proposed rule represents adequate guidance concerning the likely frequency of such discharges. The **Agency** does not believe that it would be appropriate to limit, through a change in the rule language, the discretionary authority of the OSC to determine whether a discharge would result in a substantial threat to the public health or welfare of the United States.

Section 300.323--Spills of National Significance

One commenter suggested that the intent of the preamble (that SONS will be extremely infrequent), should be added to the rule language. EPA believes that the language provided on SONS in the preamble to the proposed rule represents adequate guidance concerning the frequency of such spills. The **Agency** does not believe that it would be appropriate to limit, through a change in the rule language, the discretionary authority of the Administrator of EPA and the Commandant of the USCG to determine whether a discharge would result in a SONS.

One commenter stated that the SONS classification is not needed at

all, arguing that a properly implemented incident command system is able to provide response to any size spill. The commenter was concerned that the designation of spills as SONS may be influenced by the media or politics.

EPA believes that, during certain response situations involving spills of extreme severity or size that have the potential to greatly affect the public health or welfare of the United States, extraordinary coordination of federal, state, local, and responsible party resources may be required for containment and cleanup. In situations such as these, coordinating resources at the national level and managing relations among various government officials and the public requires significant time and effort. This may divert attention away from the actions necessary to respond to the spill itself, which, in the case of a SONS, would likely be complicated. Furthermore, while OSCs are thoroughly familiar with their regions or districts, they may be less knowledgeable about areas outside their regions or districts. The OSC in charge of responding to a spill that affects several regions, districts, or countries may benefit from communication assistance to identify and coordinate resources, evaluate site-specific conditions, and assess threats to the environment.

For these reasons, EPA developed a ``strategic management'' framework designed to assist the OSC in dealing with resource administration, government coordination, public relations, and communication for SONS, codified in Sec. 300.323. As an important **part** of the national response system, the SONS response strategies ensure that the government will be able to respond to spills of any size or severity. The designation of a SONS will, therefore, depend on the presence of exigent circumstances.

With regard to Sec. 300.323(b), two commenters requested clarification to indicate that the person named to assist the OSC is not limited to the few roles specified and that this individual's duties will be directed by (and not supersede the authority of) the OSC. One commenter also suggested that the coordination at the national level discussed in this section would best be accomplished through the incident command system, which will serve to maintain the integrity of the local command structure as the incident escalates.

EPA reiterates that the ``assistance'' provided by a designated senior EPA official in support of the OSC within the SONS response framework is intended to relieve the OSC of certain communication and coordination burdens associated with directing response efforts. If a spill is designated as a SONS, issues of communication and coordination quickly take on importance at the national level. However, this designated senior **agency** official is not subordinate to the OSC. This official will simply fill the role of the OSC for specific, limited activities related to communications and coordination, as detailed in Sec. 300.323(b). EPA believes this approach reflects historical practices.

Section 300.324--Response to Worst Case Discharges

Several commenters strongly suggested that this section needs to recognize there can be many ``worst case'' discharges from small facilities or vessels where implementation of the requirements of this provision would not be justified or otherwise appropriate. Two commenters suggested that paragraph (a) also include a requirement that the discharge pose a substantial threat to public health or welfare of the United States before the measures for responding to a worst case discharge would be triggered. They believe this would provide the OSC with additional latitude to activate only those measures most

appropriate to the circumstances. Alternatively, one commenter suggested that full implementation of the ACP worst case provisions would not be necessary for all worst case spills; another suggest deleting the requirement to notify and use the NSFCC.

EPA notes that CWA section 311(d), as amended by the OPA, requires the NCP to include ``procedures and standards for removing a worst case discharge of oil and for mitigating or preventing a substantial threat of such a discharge.'' CWA section 311(j), as amended by the OPA, requires Area Committees to prepare an ACP for their area that, when implemented in conjunction with the NCP, will be adequate to remove a worst case discharge and to mitigate or prevent a substantial threat of such a discharge. CWA section 311(j) also requires that the National Response Unit (i.e., the NSFCC) shall coordinate use of private and public personnel and equipment to remove a worst case discharge, and to mitigate or prevent a substantial threat of such a discharge. Once the OSC has determined that an oil spill is a ``worst case discharge'' the OPA mandate concerning such discharges must be followed. Because Secs. 300.324(a)(1) and (3) and 300.324(b) reflect the requirement of the OPA worst case discharge-related provisions, they must be included in the NCP.

However, EPA recognizes that proposed Sec. 300.324 has created some confusion regarding the implementation of the worst case discharge provisions of the ACP. These provisions are activated only when the OSC has determined that a discharge is a worst case discharge, as specified in the ACP. Oil spills that meet the definition of worst case discharge specified in vessel and facility response plans, but not the ACP, would not require activation of the worst case discharge provisions of the ACP. In addition, the OSC is required to notify the NSFCC only of ACP-defined worst case discharges. The rule language in Sec. 300.324 of the NCP has been revised to reflect these clarifications.

Two commenters suggested deletion of paragraph (a)(2); they asserted that the OSC should not have to require the responsible party to implement their response plan, because it would be automatically initiated by the responsible party without direction from the OSC. EPA agrees that the responsible party is required to automatically initiate its response plan without direction from the OSC. However, EPA is restating this requirement in Sec. 300.324(a)(2) for clarification purposes.

Section 300.335--Funding

One commenter noted that the preamble to the proposed rule states that the provisions of Sec. 300.320(b)(3)(iii) are addressed in Sec. 300.335. However, the commenter noted that former Sec. 300.320(b)(3)(iii) addresses the actions an OSC is to take if there is a minor discharge and that provision is not addressed in the proposed Sec. 300.335, which deals with OSLTF funding. The **Agency** recognizes that the commenter is correct; the reference to Sec. 300.335 in the preamble to the proposed rule was erroneous. The correct reference is Sec. 300.305.

One commenter noted that section 1004 of the OPA provides limitations to liability for discharges of oil and stated that although Sec. 300.335 of the proposed NCP addresses funding of removal actions, it does not reference the liability limitations described in the OPA. The commenter recommended that a reference to these liability limitations be included in the revised NCP. EPA does not consider the details of OPA liability limitations to be relevant to the funding discussion in Sec. 300.335. The purpose of Sec. 300.335 is to discuss

various scenarios for federal funding of oil spill response activities. Therefore, the recommended change is inappropriate.

One commenter stated that the preamble notes that the NCP provides that ``funding of a response to a discharge from a federally owned, operated, or supervised vessel is the responsibility of the owning, operating, or supervising **agency**.'' The commenter believed it would be helpful to define or explain ``supervised,'' or add a reference to where such explanation may be found. The commenter also noted that the NCP incorporates the OPA definition of ``responsible party,'' which excludes federal agencies, states, municipalities, commissions, or political subdivisions of a state ``that as the owner transfers possession and right to use the property to another person by lease, assignment, or permit.'' The commenter suggested that if ``supervised'' refers to facilities excluded in the OPA definition, it should be deleted from the NCP.

The commenter points out an apparent contradiction between Secs. 300.5 and 300.335(e), wherein an owner appears to be liable for funding, but may not be a ``responsible party'' under some circumstances. To harmonize these two provisions, EPA is revising Sec. 300.335(e) by adding to the end thereof ``if it is a responsible party.'' Thus, an owner will be liable if that owner also falls within the definition of ``responsible party.'' This revision clarifies that if a vessel or facility is ``supervised'' by an **agency** that is excluded from the definition of responsible party, the vessel or facility would not be liable for funding.

In addition, EPA has deleted subparagraph (f)(1) which contained an inaccurate statement that EPA may provide funds to begin timely discharge removal actions. In fact, EPA has no funding to initiate oil removal.

Subpart E--Hazardous Substance Response

Section 300.410--Removal Site Evaluation

One commenter noted that proposed Sec. 300.410(e)(1) states that ``as **part** of the evaluation under this section, the OSC shall determine whether a release governed by CWA section 311(c)(2) has occurred.'' The commenter suggested that this provision be revised to read ``CWA section 311(c)(1), as amended by OPA section 4201(a).'' EPA agrees and has made this change in the final rule.

Section 300.415--Removal Action

One commenter stated that the citation to CWA section 311(c)(1)(A) in Sec. 300.415(c)(1) is incorrect and should be changed to CWA section 311(c)(1), as amended by OPA section 4201(a). EPA agrees and has made this change in the final rule.

Subpart G--Trustees for Natural Resources

Section 300.600--Designation of Federal Trustees

Two commenters asked that the reference in the proposed rule preamble to the trustees' responsibilities for ``mitigation and assessment of damage'' be changed to read ``mitigation of injuries and assessment of damage.'' One of these commenters argued that the suggested text would be more accurate because ``damages'' is a term of art that refers to the monetary value of injury or lost use. Two commenters also argued that the word ``preplanning'' should be removed

from that same discussion that reads ``preplanning and coordination for both response and damage assessment activities are specifically required * * *'' because there is no statutory requirement for preplanning for damage assessment activities.

EPA agrees that the cited language is not completely accurate and suggests the following as a better statement of trustee responsibilities: Each trustee has responsibilities for **protection** of resources; assessment of damage; and restoration, rehabilitation, replacement, or acquisition of resources equivalent to those affected. In these roles, trustees provide advice to the OSC on **environmental** issues, including appropriate removal countermeasures, that should be considered in the ACP; provide timely recommendations to the OSC during an incident for the application of various removal countermeasures; may initiate a preliminary survey of the area affected by a discharge to determine if trust resources are, or potentially may be, affected; and carry out a damage assessment of the area in order to recover monies to restore, rehabilitate, replace, or acquire equivalent natural resources. Preplanning and coordination for damage assessment activities are strongly encouraged at the regional and area levels, both during the area and regional plan preparation and during specific incidents when coordination must be with the predesignated OSC.

One commenter, noting the phrase ``managed or controlled'' in Sec. 300.600(a), suggested that the word ``**protection**'' in the second sentence of Sec. 300.600(b)(1) should be changed to ``control.'' EPA agrees and has made the change in today's final rule.

The same commenter claimed the use of ``most'' to modify ``anadromous fish'' in Sec. 300.600(b)(1) is misleading and inaccurate. EPA agrees and has made this change as well as a conforming change in Sec. 300.600(b)(2) to delete ``certain'' before ``anadromous fish'' in the second sentence to more accurately reflect the trusteeship of anadromous fish.

In addition to these changes made in response to public comments, Sec. 300.600 has been further revised to clarify that trusteeship extends to the ecosystems supporting specific natural resources, and that habitat is included as **part** of the ecosystem. This was recognized to a degree by the current language of Sec. 300.600(b)(1), referring to particular ``examples'' of ecosystems and habitats. The revised language clarifies that the supporting ecosystem concept applies generally, and was not intended to refer solely to the specific example of marine fishery resources. In addition, the revised language reflects that trusteeship over natural resources also extends over migratory species and their supporting ecosystems throughout their range within the sovereign jurisdiction of the United States, states, or tribes.

Section 300.605--State Trustees

One commenter requested that the word ``may'' in the provision reading ``The EPA Administrator or USCG Commandant or their designee may appoint the state lead trustee as a member of the Area Committee,'' be replaced by the word ``shall.'' The commenter stated that this change would clarify that the lead trustee designated by the governors shall automatically be appointed to the Area Committee.

Membership on the Area Committee is an issue within the discretion of EPA and the USCG. EPA and USCG wish to retain this discretion and not commit to a membership decision, in advance, in all cases. The **Agency** expects, however, that the decision regarding membership of the state lead trustee will be made by EPA or the USCG in consultation with state representatives on the Area Committee.

For consistency with revised Sec. 300.600, the phrase ``including their supporting ecosystems'' has been added to modify the term ``natural resources.''

Section 300.610--Indian Tribes

One commenter asked for an explanation of the conditional language regarding ``trust restrictions on alienation'' of natural resources. The commenter also asked EPA to clarify whether Indian tribes are voting members of the RRT. In addition, the commenter asked whether Indian tribes are considered ``participating agencies'' under Sec. 300.155 to determine if Indian tribes must clear their public statements through the federal OSC's news office.

With regard to the language regarding ``trust restrictions,'' this term refers to land owned by an individual Indian, which has a restricted title. That is, the land cannot be sold without the permission of the government, generally the DOI.

Regarding the commenter's other questions about Indian tribes, Sec. 300.305 specifically defines ``states'' to include Indian tribes for purposes of the NCP, unless otherwise noted. Section 300.180(b) explains that Indian tribes have the opportunity to participate as **part** of the response structure, as provided in the ACP. Indian tribe representatives also may participate fully in all activities of the appropriate RRT.

For consistency with revised Sec. 300.600, the phrase ``including their supporting ecosystems'' has been added to modify the term ``natural resources.''

Section 300.615--Responsibilities of Trustees

Several comments concerned the procedures governing NRDAs. One commenter argued that response management/direction and damage assessment should be considered separate functions, performed by separate agencies, because of potential conflicts of interest within agencies and among individuals in those agencies. The commenter suggested reinforcing this division by separating, in time, spill response from NRDA activities, just as remediation and restoration activities are separated from removal action under CERCLA. The commenter also stated that agencies or individuals responsible for damage assessments should not be able to benefit from damage awards, either through a monetary or job security incentive. The commenter argued that such benefits were incurred by certain agencies during the Exxon Valdez spill. The commenter suggested that the incentive for such benefits should be removed by clearly defining the mission of government agencies responding to spills (i.e., to minimize the ecological impact of the spill) and by ensuring that agencies with responsibilities for spill response share information and cooperate fully with all parties responding to a spill. Finally, the commenter argued that monies designated for implementing the restoration plan should not be used for purposes unrelated to restoration, such as funding a research institute or purchasing land.

Spill response and damage assessments are separate functions, performed by separate agencies. At the federal level, only the USCG and EPA are tasked with response management and direction, while only the natural resource agencies (DOI, DOC/NOAA, U.S. Department of Agriculture, Department of Energy, and Department of Defense) are responsible for NRDAs. Natural resource trustees also assist the OSC in determining response priorities and strategies. This role was reinforced in OPA section 1011, which requires the President to consult

with the trustees on removal actions. The trustees advise the OSC, who retains final decisionmaking authority on response actions. Both the trustees and the OSC agencies have the same basic mission--**protection** of the environment. By advising the OSC on response, trustees may be able to avoid or reduce the level of injury to natural resources from a spill.

Entirely separating these activities in time is not possible. The preamble to the DOC proposed rule on NRDAs (59 FR 1062, January 7, 1994) explains that the first phase of NRDA activities, called preassessment activities, is likely to be conducted simultaneously with the OSC-coordinated response activities. Some information needed for NRDA is ephemeral and/or perishable and must be gathered quickly, before it disappears. Also, conducting these activities simultaneously is generally more cost-effective than conducting them separately. Both activities may involve gathering the same or similar information. If, for example, an OSC or responsible party is collecting samples, those samples may be shared with the trustee(s), if all parties agree. Trustees may need to collect some data themselves to accomplish their NRDA responsibilities.

Information should, to the maximum extent possible, flow freely between those agencies involved in the response and those involved in the damage assessment. In addition, it is important that the activities of the two groups be closely coordinated, as is the intent of Sec. 300.615(c)(3)(ii). However, EPA has added language to this section to reinforce that information supportive of the response phase, although collected for damage assessment, should be made available immediately to the OSC to support his or her decisions. This information flow will most likely be through the SSC who, as **part** of the OSC's staff, serves as the interface with the lead administrative trustee for the OSC.

With regard to the use of damage awards, for spills occurring after August 1990, the use of sums recovered as a result of a damage assessment conducted under the NOAA NRDA rule is governed by section 1006(f) of OPA and includes NRDA and development and implementation of a restoration plan. Such monies cannot be used for ongoing funding of base program costs or for activities other than assessment and ``the restoration, rehabilitation, replacement, or acquisition of the equivalent, of natural resources.'' The budgets of natural resource trustee agencies do not include funding from natural resource damage settlements or awards as **part** of their program operations.

The same commenter said that trustee agencies should define their NRDA data needs in advance of a spill so that data required by the trustees could be collected during the spill response without directly involving the trustees. The commenter also argued that information gathered about a spill should be shared among the government agencies, responsible party, and contractors, so that response efforts may be launched, coordinated, and made more effective based on that information.

This point is addressed in the proposed NRDA rule (59 FR 1062, January 7, 1994). The NCP is not the appropriate rule to address this issue. The proposed NRDA rule strongly encourages federal, state, tribal, and foreign trustees to develop prespill plans at the local area or regional level. Suggested prespill activities include identifying sources of information for background data, designing a general approach and protocols for data collection and analysis, and establishing a centralized data management system for NRDA data. The proposed rule also encourages information gathering in the most effective and efficient way possible. General information needs can be worked out in advance, but each spill is different and thus has

specific information needs.

Another commenter noted that the proposed NCP does not make clear the role of the responsible party in assessing natural resource damages and does not describe the duties of the trustees with respect to the responsible party. The commenter suggested that the final rule explicitly authorize trustees, under certain circumstances, to delegate the authority to conduct the NRDA to the responsible party. Under such circumstances the natural resource trustee would retain final decisionmaking and approval authority. The commenter noted that while the proposed revisions to the NCP provide that natural resource trustees may follow the procedures outlined in the DOI regulations governing NRDAs, which support this approach, the NCP should explicitly authorize the trustees to delegate the authority to carry out the assessment to the responsible party.

The role of the responsible party in NRDA for oil spills is addressed in the proposed NRDA rule. The NCP covers spill preparedness and response, not damage assessment and these comments are, therefore, beyond the scope of this rulemaking. However, it should be noted that the NCP does not impose any of its own restrictions on the relationship between the trustees and the responsible parties.

One commenter stated that the NCP does not include requirements concerning the coordination of damage assessment or restoration activities, presentation of claims, or settlement negotiations between the state representative and the OSC or RRT. The commenter argued that the lack of such requirements does not support the OPA section 1006 provision which states that liability for natural resource damages ``shall be (1) to the United States Government * * * (2) to any State * * *.''' The commenter further argued that without a single lead trustee for the state to prepare and pursue its natural resource damage claim, settlement negotiations would be cumbersome and several agencies within the state may duplicate the damage assessment process. To avoid these difficulties, the commenter suggested that Sec. 300.615 be amended by adding a new subparagraph (c)(iv) which would read, ``Liability for natural resource damage shall be to the United States government, any State, any Indian tribe, and to the government of a foreign country and claims asserting such liability shall be presented and filed by the United States government, any State, and Indian tribe, or the government of a foreign country.''

The commenter has primarily raised NRDA issues, which are being addressed by the proposed NRDA rule. The NCP covers spill preparedness and response, not damage assessment, and these issues are, therefore, beyond the scope of this rulemaking.

However, EPA would like to clarify the roles of the state during the response phase. The state may serve in three roles: (1) as a natural resource trustee performing damage assessment during response operations; (2) as a natural resource manager for spill response activities (such as wildlife rehabilitation) undertaken under the OSC's response structure; and (3) as a responder as **part** of the response management structure. The designation of a single lead state trustee for damage assessment is outside the scope of these NCP revisions since this rule does not address NRDA issues. A lead administrative trustee is designated on an incident-by-incident basis to serve as the interface with the OSC on damage assessment activities and to coordinate natural resource trustee activities, state, federal, and tribal. This may be a state trustee. For spill response, the state participates as **part** of the response management structure, along with a representative of the responsible party and the OSC.

Concerns expressed by the commenter regarding the potential for multiple entities within a state asserting control over the same

resources, double recovery, and other potential conflicts within the state in implementing its damage assessment responsibilities are most appropriately addressed in the ongoing NRDA rulemaking.

One commenter suggested the reference to the OPA in Sec. 300.615(c)(2)(i) should be to section 1006(c) rather than 1006(e). EPA agrees and has made this change.

Finally, one commenter suggested corrections in the language to Sec. 300.615(c)(3)(i) and (iii) to eliminate the reference to a lead administrative trustee role in the former and to conform to a USCG proposed rule relating to access to the OSLTF in the latter. EPA agrees and has made these changes.

Subpart H--Participation by Other Persons

Section 300.700--Activities by Other Persons

Two comments were received on this subpart. One commenter suggested the NCP should address procedures for response resources to switch from private to government funding, and how government funding may supplement private resources.

Federal procurement laws address the requirements for contracting for goods and services, even under the conditions described by the commenter. The OSC has contracting services available as **part** of the federal response organization and no further discussion of this issue is necessary in the NCP. The OSC has full access to funding to supplement private response resources, however, the federal procurement laws must still be followed if federal funding is to be used. These requirements are adequately addressed in the federal procurement regulations and directives and no further discussion of funding details in the NCP is considered necessary.

The other commenter recommended that any contractor responding to a spill at the request of an OSC be guaranteed payment out of the OSLTF, and further, if a spiller defaults on payment to a cleanup contractor it hired, the contractor should be guaranteed payment out of the OSLTF.

Contractors responding to a spill at the request of the OSC do so under the provisions of federal laws that address the procurement of goods and services. Anyone can submit a claim for uncompensated removal costs; however, no one can guarantee full payment from the OSLTF. While a contractor could expect reasonable reimbursement for uncompensated costs, no assurances can be provided that the full benefits of a contract negotiated between two private entities would be fully reimbursable. No change to the NCP is necessary or appropriate.

Subpart J--Use of Dispersants and Other Chemicals

Section 300.900--General

One commenter recommended that EPA defer promulgating revisions to Subpart J until the results of a number of studies that are being conducted on alternative response techniques to mechanical recovery, including dispersants and in-situ burning, can be evaluated.

In enacting the OPA, Congress required the President (delegated to EPA) to revise the NCP to reflect the new provisions and authorities of the statute. In promulgating the proposed and final revisions to Subpart J of the NCP, EPA has attempted to take into account all readily available information and studies concerning oil spill response measures, including alternative response measures. EPA believes that it must promulgate the final NCP at this time in order to avoid any further delays in codifying the provisions and authorities established by the

OPA. If new information or studies become available that impact the **Agency's** regulation of oil spill response measures under Subpart J, EPA will review this information and make regulatory changes if and as appropriate.

Three commenters stated that proposed Subpart J fails to present a balanced approach to oil spill response techniques, placing an undue emphasis on chemical countermeasures and failing to adequately address mechanical recovery strategies. One commenter noted that Subpart J's emphasis on chemical countermeasures is inconsistent with the OPA and contrary to current USCG regulations, which provide that mechanical containment and recovery is the response of first choice.

EPA does not agree with the commenters that Subpart J fails to present a balanced approach to oil spill response techniques. Subpart J does not state or imply that chemical countermeasures are preferred over mechanical recovery devices. EPA believes that the circumstances surrounding oil spills and the factors influencing the choice of a response method or methods are many, and the NCP does not and should not indicate a preference for one response method over another. OSCs, RRTs, and Area Committees must be afforded flexibility in authorizing or preauthorizing the use of a specific response method to protect the public health and welfare and the environment.

EPA does recognize, however, that Subpart J focuses on the regulation of chemical and bioremediation spill mitigating devices and substances. As stated in the preamble to the proposed NCP, EPA believes that Congress' primary intent in regulating products under the NCP Product Schedule is to protect the environment from possible deleterious effects caused by the application or use of these products. In looking at the long- and short-term effects on the environment of all spill mitigating devices and substances, EPA has concluded that chemical and bioremediation countermeasures pose the greatest threat for causing deleterious effects on the environment. As a result, the **Agency** is focusing its regulatory efforts on these substances and is listing them on the Product Schedule, and is not listing mechanical recovery devices.

EPA is also not regulating the use of mechanical recovery devices under Subpart J because USCG has traditionally overseen the regulation of these devices. USCG and the American Society for Testing and Materials (ASTM) are currently working together to develop equipment standards for mechanical recovery devices. The MMS also has been attempting to develop equipment standards and facilitate research and development on mechanical devices. EPA believes it would be unnecessarily duplicative for it to focus its efforts in these areas at the same time other federal agencies are addressing these issues.

EPA would like to emphasize that it is not discouraging the use of mechanical recovery devices to respond to oil spills by not regulating these devices under Subpart J or listing them on the Product Schedule. The listing of a product on the Product Schedule does not mean that EPA approves, authorizes, or encourages the use of that product on an oil spill; rather, the listing of a product means only that data have been submitted to EPA as required by Subpart J of the NCP. The fact that mechanical devices will not be listed on the Product Schedule does not mean that these devices cannot be used by OSCs in response to discharges of oil or included in preauthorization plans by Area Committees and RRTs. On the contrary, the fact that these devices are not listed on the Product Schedule means that OSCs can use mechanical recovery devices without being subject to the provisions in Sec. 300.910 governing the authorization of use of products listed on the Product Schedule.

Three commenters disagreed with EPA's interpretation of the phrase ``other spill mitigating devices and substances,'' stating that this

phrase should be interpreted to include mechanical recovery devices such as pumps, booms, or skimmers. One commenter stated that the legislative history of the OPA, as detailed in the Conference Report for the OPA, demonstrates that Congress intended this phrase to be interpreted broadly and to include mechanical, surveillance, and chemical and biological response techniques.

As discussed above and in the preamble to the proposed NCP, EPA believes that Congress' primary intent in regulating products under the Product Schedule is to protect the environment from possible deleterious effects caused by the application or use of these products. EPA is not interpreting the phrase ``other spill mitigating devices and substances'' to include mechanical recovery devices, and is not regulating these devices under Subpart J, because the **Agency** does not believe that the use of these devices to respond to oil spills presents a significant **environmental** danger. EPA has reviewed the Conference Report for the OPA [Conf. Rep. 101-653, 101st Cong. 2nd Sess. (1990)] and believes that it does not clearly indicate whether the term ``other spill mitigating devices and substances'' was intended to include mechanical recovery devices for the purposes of the NCP Product Schedule. There is certainly no indication in the Conference Report that the inclusion of mechanical recovery devices on the Product Schedule be mandatory. EPA believes that its interpretation is reasonable.

Section 300.910--Authorization of Use

One commenter expressed opposition to the mandatory requirement in new Sec. 300.910(a) that RRTs and Area Committees address the preauthorization of chemical and bioremediation product use. The commenter argued that EPA has not demonstrated that the current system is ineffective or untimely and that this mandatory requirement will take time away from the evaluation of mechanical and other response techniques.

As discussed in the preamble to the proposed NCP, the preauthorization option under existing Sec. 300.910(e) has been used infrequently in the past. Although some RRTs have developed preauthorization plans for the use of products in response to oil spills, the overall election to make use of this option has been less comprehensive than EPA envisioned when the provision was developed. Consequently, EPA proposed to make, and is today making, the existing preauthorization option mandatory. EPA believes that a more comprehensive use of preauthorization by the RRTs and Area Committees will create a more effective and timely oil spill response system because many decisions on product use will be made prior to the occurrence of oil spills. The **Agency** does not agree with the commenter that the mandatory preauthorization provision will de-emphasize or take time away from the consideration of the use of mechanical and other response techniques. RRTs and Area Committees should address the use of mechanical and other response techniques, as well as spill mitigating devices and substances regulated under Subpart J, in their preauthorization plans. Also, EPA would like to stress that preauthorization decisions may result in not preauthorizing the use of a specific chemical countermeasure; for example, areas may be designated in which the use of certain dispersants or other spill mitigating devices and substances is prohibited.

Another commenter suggested that preauthorization plans be required to address the use of sorbents. The commenter argued that such planning would promote the use of the most effective and appropriate sorbent for any given spill. The commenter also noted that the misuse of a sorbent product or the use of the wrong sorbent product can result in a totally

ineffectual cleanup, increased and unnecessary **environmental** damages from oil pollution, and additional cleanup expenses.

As discussed in the preamble to the proposed NCP, EPA does not interpret the phrase ``other spill mitigating devices and substances'' to include sorbents and does not regulate sorbents under Subpart J or list them on the Product Schedule. EPA believes that the use of sorbents, by themselves, will not create deleterious effects on the environment because sorbent materials are essentially inert and insoluble in water and because the basic components of sorbents are non-toxic. Consequently, RRTs and Area Committees are not being required to address the use of sorbents as **part** of their planning activities or when they are developing preauthorization plans under Subpart J. This does not mean, however, that RRTs and Area Committees cannot or should not address the use of sorbents in their preauthorization plans. EPA encourages RRTs and Area Committees to address the use of all types of spill mitigating devices and substances, including those not listed on the Product Schedule, when developing preauthorization plans. Also, as suggested by the commenter, the **Agency** encourages RRTs and Area Committees to consult the USCG comprehensive sorbent data base and the research being conducted by Environment Canada and ASTM when making preauthorization decisions on the use of sorbents.

Two commenters expressed concern that, although new Sec. 300.910(a) encourages preauthorization, it allows the RRTs and Area Committees too much latitude for the disapproval of products without adequately defining the conditions under which such disapprovals would be appropriate. These commenters recommended that the NCP should clearly specify, as guidance for the RRTs and Area Committees, the conditions under which the use of a product is appropriate and require pre-spill approval for those conditions. The commenters suggested that new Sec. 300.910(a) establish a preauthorization process that requires the approval of products, except in those limited circumstances where there are adequate scientific data clearly indicating that such use would be harmful. An additional commenter recommended that guidance be provided to the RRTs and Area Committees on the applicability of data from the required effectiveness and toxicity tests.

EPA believes that the RRTs and Area Committees must be afforded flexibility in considering relevant factors for making preauthorization decisions and developing preauthorization plans. EPA does not believe that it is appropriate or feasible to include all of the information necessary to provide adequate guidance for the RRTs and Area Committees on the appropriateness of preauthorization approvals or disapprovals or the applicability of test data in the NCP. This information should be provided through separately developed guidance materials.

Four commenters stated that the RRTs do not have the legal authority to approve or disapprove of preauthorization plans developed by Area Committees. These commenters argued that the approval process proposed in new Sec. 300.910(a) is inconsistent with the OPA, which provides that Area Committees alone are responsible for expediting authorization of the use of dispersants and other spill mitigating substances. These commenters also argued that the RRT review and approval authority is counterproductive and will result in unnecessary delays. One commenter suggested that this section should provide procedures for the coordination of Area Committee activities and that the RRTs should assist the Area Committees in this regard.

The OPA amends section 311(j) of the CWA to require Area Committees to ``work with state and local officials to expedite decisions for the use of dispersants and other mitigating substances and devices'' and to ``describe the procedures to be followed for obtaining an expedited

decision regarding the use of dispersants.'" To meet these requirements, EPA proposed to revise new Sec. 300.910(a) (in addition to changes to Subpart C) to require that Area Committees be actively involved in the preauthorization process and that, as **part** of their planning activities, they develop preauthorization plans that address the desirability of using appropriate products on the Product Schedule.

EPA does not agree with the commenters that requiring RRT review and approval of preauthorization plans developed by Area Committees is inconsistent with the OPA. The OPA does not stipulate that Area Committees alone have responsibility for oil spill contingency planning. The standing RRTs also have responsibilities for oil spill contingency planning, specifically on a regional basis. In order to create the best possible response system, it is important that the regional-level and area-level contingency planning efforts of the RRTs and Area Committees, respectively, are closely coordinated with each other and are consistent. EPA believes that the RRTs should serve in an advisory and approval role regarding preauthorization plans developed by Area Committees to ensure this consistency and because the RRTs' expertise in oil spill response will be a valuable asset in the development of these preauthorization plans. RRTs and Area Committees should work together to develop mutually-acceptable preauthorization decisions and plans. The **Agency** would like to clarify that the RRT review and approval authority applies only to preauthorization decisions or plans, and not to the entire content of ACPs. Also, the EPA Administrator and the Commandant of the USCG possess the ultimate authority for approving or disapproving an entire ACP, including the preauthorization plan. This authority is not delegated in any way to the RRTs.

EPA does not believe that the RRT review and approval authority is counterproductive or will result in significant delays to the preauthorization process. As discussed in the preamble to the proposed NCP, in a number of instances (e.g., in the inland waters) RRTs may fulfill the role of the Area Committees. In these instances, coordination between the two separate entities will be facilitated to the extent the RRT addresses both regional- and area-level contingency planning. In instances where the RRT and Area Committees may exist as separate entities, a number of RRT representatives will most likely also serve on the Area Committees for that region. This should facilitate the coordination between these two bodies and expedite the review and approval of preauthorization plans by the RRT.

EPA would like to clarify the RRT review and approval authority. All members of the RRT will be afforded an opportunity to review and provide input to the Area Committee on a draft preauthorization plan. However, only the RRT representatives from EPA and the state(s) with jurisdiction over the waters of the area to which the plan applies and the DOC and DOI natural resource trustees will have the authority to approve, disapprove, or approve with modification the draft preauthorization plan. This approval process is consistent with the authorization procedures contained in existing Sec. 300.910 and should minimize the time necessary for RRT approval of preauthorization plans developed by the Area Committees. New Sec. 300.910(a) is being revised to state that ``The RRT representatives from EPA and the states with jurisdiction over the waters of the area to which a preauthorization plan applies and the DOC and DOI natural resource trustees shall review and either approve, disapprove, or approve with modification the preauthorization plans developed by Area Committees, as appropriate.''

One commenter suggested that the NCP establish time limits for the review and approval of preauthorization applications. Specifically, the commenter recommended that EPA establish a 60-day review period during

which Area Committees must determine whether a preauthorization application is complete and approve or deny the application. The commenter also suggested that if an Area Committee fails to act within the specified period of time, the application should be considered approved.

EPA does not believe that it is appropriate for the NCP to establish specific deadlines for the review and approval of preauthorization applications at this time because both the Area Committee and the preauthorization process are still in the initial stages of implementation. Area Committees should develop preauthorization plans and review applications as expeditiously as possible, but they also must be afforded flexibility in accomplishing this.

One commenter recommended that new Sec. 300.910(a) and Section 4.3(a) of Appendix E mention the need for preauthorization plans to cover compliance with section 7 of the Endangered Species Act. This commenter also recommended that, under new Secs. 300.910 (b) and (c), consultation with the DOI and DOC natural resource trustees should be required for obtaining product approvals in all cases, not just "when practicable." The commenter noted that the natural resource trustees have a strong interest, in all instances, in ensuring that trust resources are not inadvertently damaged by the application of chemical countermeasures.

EPA agrees that the RRTs and Area Committees should be aware of the need for preauthorization plans to comply with the Endangered Species Act. Development of these plans must include compliance with section 7 of the Endangered Species Act. The **Agency** believes that the natural resource trustee representatives to both the RRTs and Area Committees can assist in this matter by facilitating consultation to ensure this compliance during the planning process. Also, EPA and the USCG plan to work with the Fish and Wildlife Service and NOAA to develop guidance on this issue. EPA believes that these steps will be more effective in addressing this issue than adding new language to this section of the NCP.

EPA does not agree with the commenter that, under new Secs. 300.910 (b) and (c), consultation with the DOC and DOI RRT representatives should be mandatory in all instances. EPA believes that the case-by-case decisionmaking process for OSCs must be flexible and must allow them to minimize the burden of any consultations due to the time-critical nature of this process. In most instances, OSCs will consult with the DOC and DOI representatives, but there may be instances where this consultation would create critical delays in the decisionmaking process.

Another commenter stated that new Sec. 300.910(f) should be revised to compel the RRTs to require the performance of supplementary toxicity and effectiveness testing when developing preauthorization plans. This commenter argued that in order for an RRT to do a responsible job of preauthorizing the use of a product for a specific region, it must possess regionally specific effectiveness and toxicity testing data.

EPA does not agree with the change suggested by this commenter. EPA believes that the RRTs should have the authority to require additional testing if they decide it is necessary, but should not be compelled to require this additional testing in all instances. Situations may exist where requiring this additional testing would place an unnecessary regulatory burden on both the RRTs and the product manufacturers/vendors.

Two commenters stated that the RRT supplementary testing authority contained in new Sec. 300.910(f) should be deleted from the final rule. These commenters expressed opposition to this authority because, in the commenter's view, it is intended to make the preauthorization of

dispersants and other chemicals more difficult, erodes the statutory authority of the Area Committees, and could add significant delays to the preauthorization process. One of these commenters also argued that if EPA anticipates using tests other than those specified in Appendix C for this supplementary testing, these tests should be included in the NCP and be subject to review as **part** of the rulemaking process.

EPA would like to clarify the provisions of the supplementary testing authority contained in new Sec. 300.910(f). Under this authority, RRTs are authorized to require product manufacturers to conduct supplementary effectiveness or toxicity testing due to site- or area-specific concerns when developing preauthorization plans. Any supplementary testing that may be conducted will follow the effectiveness and toxicity testing protocols specified in Appendix C of the NCP. The RRTs are authorized to require these tests to be conducted, due to site- or area-specific concerns, using parameters other than those specified in Appendix C. For example, an RRT might require the performance of the dispersant effectiveness test (the Swirling Flask Dispersant Effectiveness Test) using a type of oil other than that specified in Appendix C; or an RRT might require the performance of the dispersant toxicity test using an invertebrate species other than that specified in Appendix C.

EPA's purpose in adding new Sec. 300.910(f) is to clarify the authority of the RRTs concerning product testing requirements and to provide more relevant information to the RRTs and Area Committees for their contingency planning efforts. This authority is not intended to make the preauthorization of certain products more difficult and does not authorize the RRTs to establish more stringent effectiveness and toxicity criteria. EPA does not believe that the addition of this new paragraph in any way erodes the authority of the Area Committees, but will enable them to make more informed preauthorization decisions by providing them with additional site- or area-specific data, if appropriate. In addition, EPA believes that the authority contained in this new paragraph will not create substantial delays in the preauthorization process, and that any minor delays that may occur are necessary to provide the RRTs and Area Committees the information they need to make informed preauthorization decisions.

Section 300.915--Data Requirements

Dispersant Effectiveness Testing Protocol

Four commenters expressed opposition to EPA's adoption of the Swirling Flask Dispersant Effectiveness Test as the standard test for measuring dispersant effectiveness. These commenters stated that this change was based on a limited study and that there are more appropriate dispersant effectiveness tests available internationally. One commenter suggested that EPA should have considered the Warren Springs Laboratory (WSL) Test, which has been in use in the United Kingdom for several years, and the Exxon Dispersant Effectiveness Test (EXDET). Another commenter recommended that EPA defer implementing the Swirling Flask test until an international intercalibration work group that is conducting research on dispersant effectiveness testing can complete its work and make recommendations.

EPA believes that sufficient testing was performed to qualify the Swirling Flask test as an appropriate replacement for the Revised Standard Dispersant Effectiveness Test (RSDET). In April 1991, EPA convened a conference of world experts to advise it on the state-of-the-art methods available for dispersant effectiveness testing. As a result of that meeting, EPA decided to pursue the three laboratory effectiveness tests it studied: RSDET, Swirling Flask test, and IFP

Test. The determination was made at that time that these three tests offer the best combination of features for study and, although each may have some drawbacks, that they were the best three of the nearly 25 tests then available. No new information has been discovered during the last three years to modify the initial decision to select these three tests for further study.

In its laboratory study,\3\ EPA examined six different oils and three separate dispersants; ran over 150 screening tests to determine the best combinations of oil and dispersant; and evaluated those combinations using the three test methods selected by the panel of experts. EPA believes that this provides a sufficient collection of data upon which to base the change to the Swirling Flask test.

\3\See: Clayton, John R. Jr., Siu-Fai Tsang, Victoria Frank, Paul Marsden, and John Harrington, Chemical Oil Spill Dispersants: Evaluation of Three Laboratory Procedures for Estimating Performance, Final Report prepared by Science Applications International Corporation for U.S. **Environmental Protection Agency**, 1992; available in the Docket for this rulemaking.

The change to the Swirling Flask test is based primarily on the fact that this test is easier to perform, is less expensive, and requires less laboratory skill, and not on the basis of improved precision of the test itself. The statistical review of the data shows that both the Swirling Flask test and the RSDET have essentially the same precision. EPA believes that of the six or seven tests used throughout the world today, there is no test available that has greater precision than the Swirling Flask test.

The WSL Test is certainly one of the prominent laboratory dispersant effectiveness tests used in the world today. The decision not to evaluate this test in the EPA study should not be viewed as a criticism of this procedure. EPA considered this test, but the Swirling Flask test was judged to avoid some of the problems associated with the WSL Test.

The EXDET was not available for evaluation until EPA had already completed its evaluation, and has only recently (March 1993) been published in the literature. There are certainly no historical data associated with this test, in contrast to the Swirling Flask test. Further, in a brief internal review, EPA determined that the EXDET procedure offers no significant advantages over the Swirling Flask test.

The international intercalibration work group, of which EPA is a member, has reviewed the four or five laboratory effectiveness tests currently in use throughout the world today with an eye towards determining if the results of one test can be correlated to the results of another. That initial review resulted in the conclusion that there was no good way for the test results to be compared. EPA does not expect that this work group will develop a new test in the near future that will offer significant advantages over the Swirling Flask test. If such a test is developed in the future, EPA would be willing to review the method as a possible replacement for the Swirling Flask test.

Three commenters stated that the Swirling Flask test method described in Appendix C does not simulate real world conditions. Two of these commenters expressed concern that this may give some agencies and public interest groups the unrealistic expectation that dispersants may be as effective in field applications as they are in the laboratory tests. These commenters suggested that EPA explicitly state that dispersant effectiveness tests are designed and conducted only to screen

products, and that the test results should be used only for that purpose.

As stated in the preamble to the proposed NCP, the test methods described in Appendix C are intended to provide a basic set of test procedures that will provide baseline data for comparison of products on a national basis. The testing protocols were not developed with the intent of replicating possible real-world situations. In using the data currently available on the Product Schedule, OSCs and RRTs are well aware that these data are intended for use for relative comparisons and rankings of products. Future EPA guidance on the development of preauthorization plans and decisions will also address this issue.

One commenter objected to the dispersant-to-oil treat ratio (DOR) used in the Swirling Flask test method, arguing that a 1:10 ratio is at least twice as high as would normally be used in actual spill situations. The commenter noted that DORs of 1:20 or 1:25 are typical, and that the higher dispersant treat rate used in this test method would allow weaker dispersants to perform better than would be expected relative to other dispersants. This same commenter stated that the Swirling Flask test was inconsistent with the RSDDET, historical standards, and currently accepted standards because the Swirling Flask test did not produce results ranking dispersants in the same order as the RSDDET or other field-corroborated laboratory tests. The commenter also noted that no other government in the world--including Canada--has officially accepted the Swirling Flask test.

Under ideal conditions, a laboratory test would be representative of real-world conditions. However, thus far this is not achievable, and EPA believes it is misleading to represent laboratory data as such. The use of any test to measure a product will only give a relative ranking of that product against other products tested with the same procedure. There is no attempt on the **part** of EPA to represent the laboratory effectiveness test results as levels that can be achieved in the field. In fact, field performance will most likely be less effective than that achieved under ideal laboratory conditions.

The DOR of 1:10 is specified for the Swirling Flask test method and was used in the EPA study to ensure that sufficient dispersant was available for complete dispersion of the test oil and because this is a practical estimate of the maximum level DOR that would be expected in the field in a real situation. This would favor better performance of the product than a lesser DOR. Furthermore, the 1:10 ratio was used in the RSDDET procedure as well as the IFP method; the same ratio was needed for all three tests to allow for proper comparison.

EPA does not believe that there should be concern about the fact that different laboratory tests will rank dispersant products differently, nor with the supposition that the Swirling Flask test ranks products differently than the existing RSDDET. There has never been a strong correlation in ranking order from test to test; i.e., 10 dispersant products will be ranked differently when tested by the various laboratory effectiveness tests available. EPA has never claimed that the detailed ranking order produced by the RSDDET is meaningful or necessarily proper. As noted in the proposed NCP, the existing RSDDET has problems associated with it (e.g., complex and expensive to perform, results in a large volume of wastewater) that will be resolved by changing to the Swirling Flask test.

EPA knows of no laboratory effectiveness test that correlates well with field experience. There are numerous factors that come into play and strongly affect whether a dispersant works well under field conditions. One of the most critical factors affecting field effectiveness is probably whether the dispersant is properly applied.

It is correct that the Swirling Flask test has not been adopted by

any other government, including Canada. However, it was developed and is used extensively by Environment Canada and adoption by the Canadian government is expected. The decision to adopt the test in the United States, however, is based on the method's attributes and not on whether it has been officially adopted by any other government.

One commenter stated that calculating the percent effectiveness value for a dispersant by averaging the percent effectiveness values for Prudhoe Bay crude and South Louisiana crude oils may not be very useful to OSCs in making decisions about the effectiveness of a particular dispersant on a single type of oil. The commenter suggested that if EPA maintains this averaging in the final rule, the **Agency** should at least identify the dispersant effectiveness values for each type of test oil separately on the Product Schedule, in addition to the average percent effectiveness value. The commenter also suggested that the Product Schedule include the results of spills-of-opportunity testing.

EPA believes that calculating the percent effectiveness value for a dispersant by averaging the values for these two test oils is the best approach because this allows the effectiveness data to reflect two types of oil that will most likely be encountered in real-world spill situations in U.S. coastal waters, yet maintains the simplicity of the testing method. The **Agency** also selected this approach because it allows a dispersant to meet the 50 percent effectiveness acceptability criterion and be listed on the Product Schedule, despite poor performance of the dispersant on one of the two test oils. EPA does agree, however, that presenting the dispersant effectiveness data separately for each type of oil, as well as for the final effectiveness value (average of the two), will enable OSCs to make a more informed evaluation of the effectiveness of specific dispersants. Consequently, EPA will provide dispersant effectiveness values for Prudhoe Bay crude, South Louisiana crude, and an average of the two for each dispersant listed on the Product Schedule. EPA notes that the dispersant effectiveness acceptability criterion will still be based upon the average percent effectiveness value of these two types of oil. Also, EPA does not believe it is appropriate to include spills-of-opportunity data on the Product Schedule because the Schedule is intended to provide baseline data for comparison of products on a national basis. Both USCG and NOAA maintain data bases that contain information on chemical countermeasures used on some significant U.S. and international oil spills.

Dispersant Toxicity Testing Protocol

One commenter objected to the proposal of the Revised Standard Dispersant Toxicity Test (RSDTT) protocol because a toxicity threshold or acceptability criterion is not established. The commenter expressed concern that the establishment of an effectiveness threshold without the establishment of a toxicity threshold encourages the use of the most effective dispersants, rather than the use of the least harmful (i.e., least toxic) dispersants, which is inconsistent with the intent of the OPA.

EPA does not agree that the approach established in the NCP does not encourage the use of the least harmful dispersants. EPA believes that the best approach to regulating dispersants is to not set a threshold or acceptability criterion for toxicity, but to provide OSCs, RRTs, and Area Committees the toxicity data and allow them to make decisions on dispersant use by weighing the toxicity data against other variables and the effectiveness data for those dispersants that meet or exceed the effectiveness threshold. In its experience in oil spill

response and contingency planning, the **Agency** has found that the factors impacting dispersant use decisions based on toxicity are more variable than those for effectiveness (e.g., what are the toxicological effects of the dispersant on the wide variety of species indigenous to the area?). The toxicity of any substance is relative to the test agent, target organisms, and the environment in which the exposure occurs. EPA believes that OSCs, RRTs, and Area Committees must be afforded a greater degree of flexibility when making dispersant use decisions based on these toxicity factors. Consequently, EPA is not establishing a toxicity threshold for dispersants. EPA does agree, however, that when making decisions on the use of dispersants, OSCs, RRTs, and Area Committees should use the least harmful dispersants that have been proven to be effective under the standardized laboratory conditions. When making these decisions, OSCs, RRTs, and Area Committees will possess toxicity data that will allow them to rank the various dispersants available based on acute toxicity.

One commenter stated that the test species specified in the dispersant toxicity testing protocol are not suitable for determining freshwater toxicity. The commenter suggested that additional or alternate toxicity tests be performed on all products intended for freshwater use.

EPA agrees with the commenter that the development and use of an alternate dispersant toxicity test for freshwater environments is a valid consideration. However, most RRTs in concert with state regulatory agencies have put in place procedures and/or guidance that restrict the use of dispersants in freshwater ecosystems due to the potential impact of the dispersants on potable water. Consequently, EPA has placed a higher priority on the development of dispersant effectiveness and toxicity testing protocols for marine environments. The **Agency** is currently considering the development of a complementary dispersant toxicity test for freshwater environments.

Another commenter objected to the use of only an acute toxicity testing protocol. This commenter argued that acute toxicity tests provide little insight into the effects of lower concentrations of pollutants and do not contribute to the understanding of the accumulative impacts of pollutants over long periods of time. The commenter suggested that there should be testing for chronic or sublethal concentrations as well as an evaluation of the effects of products on the reproduction, larval development, and growth and maturation of juvenile organisms.

EPA believes that providing the acute toxicity data specified by Appendix C to OSCs, RRTs, and Area Committees is sufficient to allow for environmentally protective authorization and preauthorization decisions on product use. The **Agency** has conducted toxicity tests of a longer duration (i.e., 7-day chronic estimator tests) that provide additional information on sublethal effects on survival, growth, and fecundity. These data,⁴ presented at the annual meeting of the Society of **Environmental** Toxicology and Chemistry (October 1992), demonstrated agreement (generally within one order of magnitude) between LC₅₀s derived from the 7-day test and the acute (48- to 96-hour) test. In cases where growth and reproductive effects were noted, contaminant levels tended to fall just below the concentration range at which survival was affected. Also, EPA believes that the acute toxicity data will be useful to OSCs, RRTs, and Area Committees with respect to risk estimation. A recently developed model⁵ allows for the risk estimation of chronic effects from acute toxicity data and allows for the integration of application data into the framework for risk estimation. In addition, OSCs, RRTs, and Area Committees are not precluded from considering any available chronic toxicity data when

making authorization or preauthorization decisions on product use.

\4\See: Whiting, D., J. Clark, J. Briceno, and C. Daniels, A Comparison of Seven-Day Chronic Toxicity Test Endpoints Using Mysids (*Mysidopsis bahia*), Silversides (*Menidia beryllina*), No. 2 Fuel Oil, and Oil Dispersant Products; available for inspection in the public docket for this rulemaking.

\5\See: Mayer, Foster, G. Krause, D. Buckler, M. Ellersieck, and G. Lee, Predicting Chronic Lethality of Chemicals to Fishes from Acute Toxicity Test Data: Concepts and Linear Regression Analysis, February 1993; available for inspection in the public docket for this rulemaking.

One commenter recommended that when conducting the RSDTT, EPA should test dispersants only, rather than testing dispersants and dispersed oil. The commenter argued that testing dispersed oil not only assesses the effects of the chemical uptake of the dispersant by the organisms, but also physical effects due to contact with dispersed oil droplets.

EPA does not agree with the recommendation suggested by the commenter. Chemical dispersants are intended to increase the rate at which an oil slick is dispersed into the water column. This dispersed oil is, by definition, a mixture of the dispersant and the spilled oil. As a result of this dispersion of oil, the possibility exists for organisms dwelling in the water column to come in physical contact with the dispersed oil. The **Agency** believes that it should not make any difference whether an organism is killed by the effects of a chemical dispersant in the water or due to physical contact with the dispersed oil (e.g., dispersed oil covering the gills of a fish, thereby inhibiting respiration). EPA believes that the fact that dispersants cause oil to enter the water column is sufficient reason to test for the toxicological effects of dispersed oil.

The **Agency** also believes that testing the oil alone, as well as the oil and dispersant mixture, will provide useful data on the relative toxicity of the oil and the potential hazards associated with dispersant use (i.e., data derived from the oil and dispersant mixture test) relative to the hazards associated with non-treatment of the oil (i.e., data derived from the oil only test). EPA believes that the comparative nature of the data will benefit the OSCs, RRTs, and Area Committees in their decisionmaking and planning activities.

The same commenter expressed concern that the dispersant toxicity testing protocol uses a series of test concentrations and durations that are significantly greater than what a marine organism would be exposed to in the real world. The commenter stated that this would result in test data that show dispersants and other products to be much more toxic than what would be expected in the field. The commenter argued that these biased data may create a negative impression among regulators, leading to decisions to prohibit the use of a product that actually could be used safely.

As discussed above, the test methods described in Appendix C are intended to provide a basic set of test procedures that will provide baseline data for comparison of products on a national basis. The testing protocols were not developed with the intent of replicating possible real-world situations. The dispersant toxicity testing protocol was developed using conservative estimates. In using the data currently available on the Product Schedule, OSCs and RRTs are well aware that these data are intended for use for relative comparisons and rankings of products.

Three commenters questioned the use of No. 2 fuel oil by the RSDTT

when the dispersant effectiveness testing protocol specifies the use of Prudhoe Bay and South Louisiana crude oils. These commenters suggested that the RSDTT be revised to use the same oils as used by the Swirling Flask test protocol. One commenter noted that the proceedings of the workshop upon which the RSDTT is partially based recommend the use of both crude oils over No. 2 fuel oil.

EPA believes that No. 2 fuel oil is the most appropriate type of oil for use in the RSDTT. The proceedings of the workshop⁶ referred to by the commenter based its test oil recommendations on the potential use of dispersants in the Gulf of Mexico. In developing the RSDTT, the **Agency** had to consider the evaluation of dispersant toxicity on a national basis. Also, one of the objectives of this workshop was to identify data needs. South Louisiana and Prudhoe Bay crude oils were ranked as the first two preferences in the workshop proceedings because there is relatively little toxicity data for these oils as compared to No. 2 fuel oil.

\6\See: Duke, Thomas and Gary Petrazzolo, eds., Oil and Dispersant Toxicity Testing, Proceedings of a Workshop on Technical Specifications, U.S. Department of the Interior, New Orleans, January 1989; available for inspection in the public docket for this rulemaking.

EPA selected No. 2 fuel oil as the dispersant toxicity test oil for several reasons. The workshop recommended the use of a test oil that is available in large quantities and is well characterized in the scientific literature; No. 2 fuel oil satisfies both of these recommendations. There is also a larger historical record of toxicity data on marine organisms for No. 2 fuel oil than for other types of oils, including South Louisiana and Prudhoe Bay crudes.

EPA agrees with the commenters, however, that eventually the effectiveness and toxicity tests for dispersants should specify the same test oils. As a result, EPA will conduct research and collect data on the RSDTT using Prudhoe Bay and South Louisiana crudes; these data will be made available to the public. If this research indicates that regulatory revisions are appropriate, the **Agency** will make these changes to the RSDTT. In addition, new Sec. 300.910(f) provides that RRTs may require supplementary toxicity testing to obtain data that will be more specific and relevant due to area- and site-specific concerns. For example, the RRT responsible for Hawaii might require toxicity testing for specific dispersants using a crude oil in addition to No. 2 fuel oil.

One commenter objected to EPA conducting the effectiveness and toxicity testing required for dispersants under Subpart J. The commenter stated that not accepting industry-generated data implies that industry is not a credible source of information. The commenter also stated that industry will be concerned that a government laboratory would interpret toxicity data too conservatively. Another commenter recommended that both EPA and commercial laboratories should be allowed to conduct dispersant toxicity testing.

EPA wishes to emphasize that it believes industry is a trustworthy source of testing data. As discussed in the preamble to the proposed NCP, EPA believes that, given the establishment of an effectiveness acceptability criterion for dispersants, it is necessary to maintain as much consistency and reproducibility in the dispersant effectiveness testing results as possible. Upon further review of this issue, EPA believes that the necessary consistency and reproducibility in

effectiveness testing results will be maintained if dispersant manufacturers are responsible for conducting the required dispersant effectiveness test and submitting the data to EPA. The **Agency** also believes that requiring dispersant manufacturers to conduct the specified effectiveness and toxicity tests is the most efficient way to ensure that OSCs, RRTs, and Area Committees have the information necessary to make informed decisions on dispersant use.

As a result, EPA is revising Subpart J and Appendix C to the NCP to require that dispersant manufacturers (or the commercial laboratories they select) conduct the effectiveness and toxicity tests specified for dispersants. Also, to guarantee **Agency** control over the consistency and reproducibility in effectiveness test results, EPA explicitly reserves in the rule the right to request additional documentation regarding both tests and conduct verification testing of the dispersant effectiveness test results submitted by manufacturers.

Although the **Agency** has decided not to finalize the proposed requirement that only EPA conduct the dispersant tests, this aspect of the final rule is consistent with the system that has been used by the regulated community to this point. Prior versions of the NCP required dispersant manufacturers to conduct the specified effectiveness and toxicity tests and submit the test results to EPA. However, dispersant manufacturers will now be responsible for conducting the new Swirling Flask Dispersant Effectiveness Test specified in Appendix C.

Only those dispersants that meet or exceed the dispersant effectiveness acceptability criterion of 45 percent must be tested for toxicity, using the RSDTT included in Appendix C. Because of this, and because the new effectiveness test is simpler, easily replicable, and less expensive than the previous test, the new requirements for dispersant testing will offer significant cost savings to those wishing to list new products on the Schedule.

EPA is revising paragraphs (7) and (8) of Sec. 300.915(a) and Section 1.1 of Appendix C to state that dispersant manufacturers are responsible for conducting the specified dispersant effectiveness and toxicity tests. Manufacturers must submit test results and supporting data, along with a certification signed by responsible corporate officials of the manufacturer and laboratory stating that (1) the test was conducted on a representative product sample, (2) the testing was conducted using generally accepted laboratory practices, and (3) they believe the results to be accurate. EPA is also revising paragraph (12) of Sec. 300.915(a) to add that laboratories performing toxicity tests for dispersants must demonstrate previous toxicity test experience in order for their test results to be accepted. Section 2.3.2 of Appendix C is being revised to state that the standard test oils for the Swirling Flask test can be obtained from the Resource Technology Corporation (2931 Soldier Springs Rd., P.O. Box 1346, Laramie, WY, 82070, (307) 742-5452).

Section 300.920(a) is also being revised to reflect that dispersant manufacturers are responsible for conducting the required effectiveness and toxicity tests. Paragraph (2) of this section explains that EPA reserves the right to request further documentation of the test results submitted by dispersant manufacturers. This paragraph also states that EPA reserves the right to verify test results and consider the results of its verification testing in determining whether a dispersant meets the listing criteria. Within 60 days of receiving a complete application for listing a dispersant on the Product Schedule, EPA will notify the manufacturer of its decision to list the product on the Schedule or request additional information and/or a sample of the product. Within 60 days of receiving the additional product data and/or sample, EPA will notify the manufacturer in writing of its decision to list or not list

the product. As was specified in the proposed NCP, a dispersant manufacturer whose product was determined not to be eligible for listing on the Product Schedule may request the EPA Administrator to review the determination.

Surface Washing Agents

Two commenters stated that EPA's intended methodology for determining the effectiveness of surface washing agents was unclear in the proposed NCP.

EPA would like to clarify that it is not specifying an effectiveness testing protocol for surface washing agents at this time. EPA is currently conducting research on developing a test method and may specify a protocol at a later date. The **Agency** is creating a separate category for surface washing agents on the Product Schedule because a number of products currently listed under the ``dispersant'' category on the Schedule are actually surface washing agents. Separating these very different kinds of products will provide a more accurate and comprehensive list of products available to OSCs, RRTs, and Area Committees during a spill and for preauthorization.

Bioremediation Agent Testing Protocols

Two commenters stated that the Bioremediation Agent Effectiveness Test proposed by EPA in Appendix C may be appropriate as a research protocol, but it is too complex and expensive for use as a standard product screening test. These commenters recommended that EPA develop a reliable, more routine, and less expensive test method for quantifying hydrocarbon degradation.

EPA agrees that the establishment of a less expensive, less complex, and better analytical procedure to determine bioremediation agent effectiveness is desirable. However, due to the complexity of crude oil and the general lack of understanding of how bioremediation agents perform, no such analytical procedure exists at this time. In developing the effectiveness testing procedure specified in Appendix C, EPA and the National **Environmental** Technology Applications Center (NETAC) did consider cost and complexity. (NETAC is a non-profit corporation created in 1988 under a cooperative agreement between EPA's Office of Research and Development and the University of Pittsburgh Trust to assist in the commercialization of innovative **environmental** technologies.) The resulting procedure is the least expensive and least complex, but still reliable, procedure that could be developed at this time. If a less expensive and/or less complex test is developed in the future, EPA would be willing to review the method as a possible replacement for the Bioremediation Agent Effectiveness Test contained in Appendix C.

One commenter suggested that EPA eliminate the use of a standard test oil (i.e., Alaska North Slope (ANS) 521) in the bioremediation agent effectiveness testing protocol because the use of internal markers in this test makes the use of a standard oil unnecessary. This commenter also inquired about the availability of the specified test oil.

EPA does not agree that the requirement for the use of a standard oil should be eliminated. EPA believes that because microorganisms respond differently to different types of oil, the use of a standard oil is necessary until a data base has been developed that can demonstrate that any type of oil will be adequate for testing purposes. For example, the light-end oils can have a potential adverse effect on the microorganisms tested and, consequently, should not be used for this test. The standard test oil can be obtained from NETAC's Bioremediation Products Evaluation Center (BPEC) (telephone number and address provided in Section 4.3 of Appendix C).

The same commenter stated that hopane may not be the best internal marker and suggested that EPA revise the Bioremediation Agent Effectiveness Test to allow for the use of different markers.

EPA agrees with the commenter that allowing for the use of more than one internal marker in the test procedure would be helpful. As a result, EPA is revising the bioremediation agent effectiveness testing protocol contained in Section 4.0 of Appendix C to allow for the use of C<INF>2- or C<INF>3-phenanthrene or C<INF>2-chrysene, as well as hopane, as the internal marker. EPA recommends, however, that hopane be used because the test method was developed using this marker.

Three commenters objected to the required use of unfiltered Gulf Breeze coast seawater in the proposed bioremediation agent effectiveness testing protocol. These commenters argued that the required use of this seawater is too restrictive for a test meant to provide data on a national basis. Two of these commenters suggested that EPA develop bioremediation effectiveness test methods for freshwater applications.

EPA agrees that requiring the use of unfiltered Gulf Breeze coast seawater in a test that is meant to be used on a national basis may be inappropriate. As a result, EPA is revising Section 4.3 of Appendix C to specify the use of ``clean natural seawater'' in the Bioremediation Agent Effectiveness Test. ``Clean natural seawater'' means that the source of this seawater must not be heavily contaminated with industrial or other types of effluent. For example, seawater should not be obtained from a source near shipping channels or discharges of industrial or municipal wastewater, or with high turbidity. EPA is currently conducting research on the issue of a bioremediation agent effectiveness testing protocol for freshwater applications and may propose such a protocol at a later date.

EPA is also making several other revisions to the bioremediation agent effectiveness testing protocol contained in Section 4.0 and the summary technical product test data format contained in Section 6.0 of Appendix C. Since the development of the proposed NCP, NETAC has finalized and published<SUP>7 its laboratory-scale testing protocol for bioremediation agent effectiveness. EPA is making these revisions to Sections 4.0 and 6.0 of Appendix C so that the Bioremediation Agent Effectiveness Test is consistent with the final protocol published by NETAC. Revisions include the addition of a section on statistical analysis, the addition of an alternative gas chromatograph/mass spectrometer (GC/MS) sample cleanup procedure, and a reduction in the number of sampling events to save costs in conducting the test. These revisions will make the performance of the test more straightforward and do not affect the basic procedures for conducting this test.

\\7\ See: Evaluation Methods Manual: Oil Spill Response
Bioremediation Agents, National **Environmental** Technology
Applications Center, Pittsburgh, PA, July 1993; available for
inspection in the public docket for this rulemaking.

EPA received several comments objecting to specific provisions of the Bioremediation Agent Toxicity Test that was proposed in Appendix C. EPA acknowledges that there are a number of technical problems with this testing protocol. Due to these problems and the short period of time available to address them, EPA is not including the Bioremediation Agent Toxicity Test in the final NCP in this rulemaking. Section 300.915(d)(8) and Appendix C are being revised to reflect this change. The **Agency** will continue its research in this area and may propose a

revised bioremediation agent toxicity testing protocol at a later date.

Section 300.920--Addition of Products to Schedule

Several commenters expressed support for the establishment of the effectiveness acceptability criterion or threshold (50 percent, plus or minus 5 percent) for listing dispersants on the Product Schedule. A different commenter objected to this threshold, suggesting that EPA adopt a threshold of 55 percent plus or minus 5 percent, which would be more in agreement with the Canadian standard. Three other commenters stated that the 50 percent threshold is too high, which could exclude some potentially useful dispersants. One of these commenters argued that the 50 percent criterion is unrealistically high for the low energy, long settling time (10 minutes) Swirling Flask test protocol, noting that the 50 to 60 percent criteria used by other countries are based on more energetic testing conditions. This commenter suggested that EPA adopt a 20 percent dispersant effectiveness threshold given its use of the Swirling Flask test.

EPA believes that establishing the 50 percent (plus or minus 5 percent) effectiveness acceptability criterion is the best approach for listing dispersants on the Product Schedule. EPA examined a number of issues when developing this criterion for dispersants. The 1988 U.S.-Canada Free Trade Agreement supports EPA in adopting a dispersant effectiveness standard that is similar to the Canadian standard (50 percent). The **Agency** believes that the 50 percent threshold strikes an effective balance between restrictiveness and leniency in listing dispersants on the Product Schedule, is generally consistent with the effectiveness thresholds established by other countries, and allows for the use of a broad range of dispersants at various levels of technical development.

The 50 percent criterion was selected by EPA as a median level with the expectation that it would eliminate from the Product Schedule those dispersant products that perform poorly. On the current Product Schedule, more than half of the dispersants do not even attain a 10 percent effectiveness level. EPA believes that **part** of the reluctance of OSCs to use dispersants is their major concern that these chemical agents will not work, even if properly applied. EPA believes that to select an effectiveness criterion below 50 percent, even with the low energy regime associated with the Swirling Flask test, would undermine the intent to eliminate those products that cannot be expected to perform in the sea.

Two commenters asked whether products currently listed on the Product Schedule would be required to be retested given the revisions to Subpart J and, if so, when these tests would be conducted and a new Product Schedule published.

EPA would like to clarify that products currently listed on the Product Schedule will be required to be retested according to the new testing protocols specified in Appendix C. These products will be retested as expeditiously as possible, but EPA has not yet established a schedule for this retesting.

Appendix E to **Part 300**--Oil Spill Response

Four commenters expressed concern regarding the effectiveness of Appendix E, as proposed, to separate oil spill response requirements of the NCP from hazardous substance release requirements.

One of these commenters stated that Appendix E, although well written and helpful, is a guidance document that should not be converted into a regulation by this rulemaking. The commenter suggested

that if the NCP were better organized, a separate appendix would be unnecessary. EPA disagrees that the information contained in Appendix E should be issued as guidance rather than promulgated as a regulation. As stated in the introduction to Appendix E, the purpose of creating a separate oil spill response appendix was to compile general oil discharge response requirements into one document to aid participants and responders under the national response system. In EPA's view, this goal would not be achieved if the oil discharge response requirements were available only in a guidance document format.

Three commenters believed that there are inconsistencies between the provisions in Appendix E and those in the body of the NCP. One of these commenters stated that the proposed approach for separating CERCLA and oil response-related requirements merely exacerbates the confusion created by the format of the existing NCP. The commenter explained that EPA's proposal effectively makes responses to oil discharges subject to two sets of potentially conflicting requirements. All three commenters recommended that EPA carefully review all relevant sections of the NCP and Appendix E to ensure absolute consistency in policy, instructions, guidance, and requirements between these two parts of the final rule.

As noted in the introduction to Appendix E in the proposed rule, the oil spill response appendix was created to compile general oil discharge response requirements into a single document to aid participants and responders under the national response system. As a result, the appendix does not alter in any way the meaning or policy stated in other sections or subparts of the NCP. As noted in the preamble to the proposed rule, some minor variations between Appendix E provisions and analogous provisions of the NCP rule language were necessary to ensure that the appendix address oil discharges only (and not hazardous substance releases as well, which continue to be addressed in the NCP rule). As suggested by the commenters, EPA has conducted a careful review of Appendix E and the relevant sections of the NCP to ensure consistency in policy, instructions, guidance, and requirements between the two documents, allowing, of course, for the intentional minor variations mentioned above. As **part** of this review, the **Agency** has revised Appendix E, where appropriate, to be consistent with the changes made in various subparts of the NCP in response to public comments. These NCP changes are identified elsewhere in this preamble and are discussed in greater detail in the Response to Comments document. EPA has not enumerated the corresponding revisions to Appendix E here because this would be redundant. In light of the substantive consistency between Appendix E provisions and those provisions of the NCP that relate to oil discharges, EPA believes that the comment that the proposal effectively made oil spill response subject to two sets of potentially conflicting requirements has been addressed adequately in today's final rulemaking.

In addition to the revisions required by comments on other subparts of the NCP, several commenters recommended editorial changes to various sections of Appendix E. EPA has incorporated these changes, as appropriate.

III. Summary of Supporting Analyses

A. Executive Order 12866

Under E.O. 12866 (58 FR 51735, October 4, 1993), the **Agency** must determine whether the regulatory action is ``significant'' and therefore subject to review by the Office of Management and Budget (OMB) and the requirements of the E.O. The Order defines ``significant

regulatory action'' as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or state, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another **agency**;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in E.O. 12866.

Pursuant to the terms of E.O. 12866, OMB has notified EPA that it considers this rule a ``significant regulatory action'' within the meaning of the Executive Order. EPA has submitted this action to OMB for review. Changes made in response to OMB suggestions or recommendations will be documented in the public record.

An economic analysis performed by the **Agency**, available for inspection in Room M2427 at the U.S. **Environmental Protection Agency**, 401 M Street, SW., Washington, DC 20460, shows that this rule would result in estimated costs to affected facilities of \$33 million during the first year that the rule is in effect and approximately \$11.3 million in each subsequent year. At a 7 percent interest rate over 10 years, the annualized costs are approximately \$14.1 million. Virtually all costs are incurred by the federal government and, in particular, by the USCG and EPA.

The economic analysis prepared in support of this final rule also includes a qualitative assessment of the **environmental** benefits associated with the revisions. The NCP revisions are expected to lead to quicker, more efficient, and more appropriate responses to discharges of oil and releases of hazardous substances. The benefits that would result from such improvements (i.e., preventing oil spills from occurring or mitigating the severity of the spills that do occur) are assumed to be substantial. Benefits include avoided clean-up costs and natural resource damages as well as reductions in other damages caused by oil spills, such as damage to private property, lost profit by business, public health risks, and foregone existence/option values.

B. Regulatory Flexibility Act

The Regulatory Flexibility Act of 1980 requires that a Regulatory Flexibility Analysis be performed for all rules that are likely to have a ``significant impact on a substantial number of small entities.'' To determine whether a Regulatory Flexibility Analysis was necessary for this rule, a preliminary analysis was conducted (see the ``Economic Impact Analysis of the Revisions to the National Oil and Hazardous Substances Pollution Contingency Plan,'' Chapter 5, available for inspection in Room M2615 at the U.S. **Environmental Protection Agency**, 401 M Street, SW., Washington, DC 20460). The results of the preliminary analysis indicate that this rule will not have significant adverse impacts on small businesses because such entities are unlikely to be affected by revisions to the federal planning and response mechanism for pollution incidents. Revisions to Subpart J would impose certain additional requirements on small manufacturers of dispersants and bioremediation agents seeking to list products on the NCP Product Schedule. However, the analysis revealed that the revisions would not significantly impact the economic viability of such concerns as the

market is currently structured. Under the final rule, certain local government agencies (e.g., LEPCs) would be required to play a supporting role in developing ACPs. The analysis revealed that fulfilling this role would not place a significant burden on a substantial number of such entities. Therefore, EPA certifies that this rule is not expected to have a significant impact on small entities, and therefore no Regulatory Flexibility Analysis is necessary.

C. Paperwork Reduction Act

The information collection requirements in this rule have been approved by OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. and have been assigned control number 2050-0141.

The collection of information required to prepare and submit materials for listing a product on the NCP Product Schedule is estimated to have a public reporting burden varying from 14 to 40 hours per response in the first year and subsequent years, with an average of 26 hours per response. This includes time to review instructions and guidance, search existing data sources, gather and maintain the data needed, and complete and review the collection of information.

Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Chief, Information Policy Branch; EPA; 401 M Street, SW. (Mail Code 2136); Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503, marked ``Attention: Desk Officer for EPA.''

D. Display of OMB Control Numbers

EPA is also amending the table of currently approved information collection request (ICR) control numbers issued by OMB for various regulations. This amendment updates the table to accurately display those information requirements contained in this final rule. This display of the OMB control number and its subsequent codification in the Code of Federal Regulations satisfies the requirements of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.) and OMB's implementing regulations at 5 **CFR part** 1320.

The ICR was previously subject to public notice and comment prior to OMB approval. As a result, EPA finds that there is ``good cause'' under section 553(b)(3)(B) of the Administrative Procedure Act (5 U.S.C. 553(b)(3)(B)) to amend this table without prior notice and comment. Due to the technical nature of the table, further notice and comment would be unnecessary.

List of Subjects

40 CFR Part 9

Environmental protection, Reporting and recordkeeping requirements.

40 CFR Part 300

Air pollution control, Chemicals, Hazardous materials, Hazardous substances, Incorporation by reference, Intergovernmental relations, Natural resources, Occupational safety and health, Oil pollution, Reporting and recordkeeping requirements, Superfund, Waste treatment and disposal, Water pollution control, Water supply.

Dated: August 15, 1994.

For the reasons set out in the preamble, **40 CFR** parts 9 and **300** are amended as follows:

1. The authority citation for **part** 9 continues to read as follows:

2. Section 9.1 is amended by adding a new entry to the table in numerical order to read as follows:

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National Oil and Hazardous Substances Pollution Contingency Plan

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300.920..... 2050-0141

3. The authority citation for **part 300** is revised to read as follows:

4. Subparts A, B, C, and D are revised to read as follows:

300.1 Purpose and objectives.
300.2 Authority and applicability.
300.3 Scope.

- 300.4 Abbreviations.
- 300.5 Definitions.
- 300.6 Use of number and gender.
- 300.7 Computation of time.

Subpart B--Responsibility and Organization for Response

- 300.100 Duties of President delegated to federal agencies.
- 300.105 General organization concepts.
- 300.110 National Response Team.
- 300.115 Regional Response Teams.
- 300.120 On-scene coordinators and remedial project managers:
general responsibilities.
- 300.125 Notification and communications.
- 300.130 Determinations to initiate response and special conditions.
- 300.135 Response operations.
- 300.140 Multi-regional responses.
- 300.145 Special teams and other assistance available to OSCs/RPMs.
- 300.150 Worker health and safety.
- 300.155 Public information and community relations.
- 300.160 Documentation and cost recovery.
- 300.165 OSC reports.
- 300.170 Federal **agency** participation.
- 300.175 Federal agencies: additional responsibilities and
assistance.
- 300.180 State and local participation in response.
- 300.185 Nongovernmental participation.

Subpart C--Planning and Preparedness

- 300.200 General.
- 300.205 Planning and coordination structure.
- 300.210 Federal contingency plans.
- 300.211 OPA facility and vessel response plans.
- 300.212 Area response drills.
- 300.215 Title III local emergency response plans.
- 300.220 Related Title III issues.

Subpart D--Operational Response Phases for Oil Removal

- 300.300 Phase I--Discovery or notification.
- 300.305 Phase II--Preliminary assessment and initiation of action.
- 300.310 Phase III--Containment, countermeasures, cleanup, and
disposal.
- 300.315 Phase IV--Documentation and cost recovery.
- 300.317 National response priorities.
- 300.320 General pattern of response.
- 300.322 Response to substantial threats to public health or welfare
of the United States.
- 300.323 Spills of national significance.
- 300.324 Response to worst case discharges.
- 300.335 Funding.

Subpart A--Introduction

Sec. 300.1 Purpose and objectives.

The purpose of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) is to provide the organizational structure and procedures for preparing for and responding to discharges of oil and releases of hazardous substances, pollutants, and contaminants.

Sec. 300.2 Authority and applicability.

The NCP is required by section 105 of the Comprehensive **Environmental** Response, Compensation, and Liability Act of 1980, 42 U.S.C. 9605, as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), Pub. L. 99-499, (hereinafter CERCLA), and by section 311(d) of the Clean Water Act (CWA), 33 U.S.C. 1321(d), as amended by the Oil Pollution Act of 1990 (OPA), Pub. L. 101-380. In Executive Order (E.O.) 12777 (56 FR 54757, October 22, 1991), the President delegated to the **Environmental Protection Agency** (EPA) the responsibility for the amendment of the NCP. Amendments to the NCP are coordinated with members of the National Response Team (NRT) prior to publication for notice and comment. This includes coordination with the Federal Emergency Management **Agency** (FEMA) and the Nuclear Regulatory Commission in order to avoid inconsistent or duplicative requirements in the emergency planning responsibilities of those agencies. The NCP is applicable to response actions taken pursuant to the authorities under CERCLA and section 311 of the CWA, as amended.

Sec. 300.3 Scope.

(a) The NCP applies to and is in effect for:

(1) Discharges of oil into or on the navigable waters of the United States, on the adjoining shorelines, the waters of the contiguous zone, into waters of the exclusive economic zone, or that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (See sections 311(c)(1) and 502(7) of the CWA).

(2) Releases into the environment of hazardous substances, and pollutants or contaminants which may present an imminent and substantial danger to public health or welfare of the United States.

(b) The NCP provides for efficient, coordinated, and effective response to discharges of oil and releases of hazardous substances, pollutants, and contaminants in accordance with the authorities of CERCLA and the CWA. It provides for:

(1) The national response organization that may be activated in response actions. It specifies responsibilities among the federal, state, and local governments and describes resources that are available for response.

(2) The establishment of requirements for federal, regional, and area contingency plans. It also summarizes state and local emergency planning requirements under SARA Title III.

(3) Procedures for undertaking removal actions pursuant to section 311 of the CWA.

(4) Procedures for undertaking response actions pursuant to CERCLA.

(5) Procedures for involving state governments in the initiation, development, selection, and implementation of response actions, pursuant to CERCLA.

(6) Listing of federal trustees for natural resources for purposes of CERCLA and the CWA.

(7) Procedures for the participation of other persons in response actions.

(8) Procedures for compiling and making available an administrative record for response actions.

(9) National procedures for the use of dispersants and other chemicals in removals under the CWA and response actions under CERCLA.

(c) In implementing the NCP, consideration shall be given to international assistance plans and agreements, security regulations and responsibilities based on international agreements, federal statutes, and executive orders. Actions taken pursuant to the provisions of any applicable international joint contingency plans shall be consistent with the NCP, to the greatest extent possible. The Department of State shall be consulted, as appropriate, prior to taking any action which may affect its activities.

(d) Additionally, the NCP applies to and is in effect when the Federal Response Plan and some or all its Emergency Support Functions (ESFs) are activated.

Sec. 300.4 Abbreviations.

(a) Department and **Agency** Title Abbreviations:

ATSDR--**Agency** for Toxic Substances and Disease Registry
CDC--Centers for Disease Control
DOC--Department of Commerce
DOD--Department of Defense
DOE--Department of Energy
DOI--Department of the Interior
DOJ--Department of Justice
DOL--Department of Labor
DOS--Department of State
DOT--Department of Transportation
EPA--**Environmental Protection Agency**
FEMA--Federal Emergency Management **Agency**
GSA--General Services Administration
HHS--Department of Health and Human Services
NIOSH--National Institute for Occupational Safety and Health
NOAA--National Oceanic and Atmospheric Administration
OSHA--Occupational Health and Safety Administration
RSPA--Research and Special Programs Administration
USCG--United States Coast Guard
USDA--United States Department of Agriculture

Note: Reference is made in the NCP to both the Nuclear Regulatory Commission and the National Response Center. In order to avoid confusion, the NCP will spell out Nuclear Regulatory Commission and use the abbreviation ``NRC'' only with respect to the National Response Center.

(b) Operational Abbreviations:

ACP--Area Contingency Plan
ARARs--Applicable or Relevant and Appropriate Requirements
CERCLIS--CERCLA Information System
CRC--Community Relations Coordinator
CRP--Community Relations Plan
DRAT--District Response Advisory Team
DRG--District Response Group

ERT--**Environmental** Response Team
ESF--Emergency Support Function
FCO--Federal Coordinating Officer
FRERP--Federal Radiological Emergency Response Plan
FRP--Federal Response Plan
FS--Feasibility Study
HRS--Hazard Ranking System
LEPC--Local Emergency Planning Committee
NCP--National Contingency Plan
NPFC--National Pollution Funds Center
NPL--National Priorities List
NRC--National Response Center
NRS--National Response System
NRT--National Response Team
NSF--National Strike Force
NSFCC--National Strike Force Coordination Center
O&M--Operation and Maintenance
OSC--On-Scene Coordinator
OSLTF--Oil Spill Liability Trust Fund
PA--Preliminary Assessment
PIAT--Public Information Assist Team
RA--Remedial Action
RCP--Regional Contingency Plan
RD--Remedial Design
RERT--Radiological Emergency Response Team
RI--Remedial Investigation
ROD--Record of Decision
RPM--Remedial Project Manager
RRC--Regional Response Center
RRT--Regional Response Team
SAC--Support **Agency** Coordinator
SERC--State Emergency Response Commission
SI--Site Inspection
SMOA--Superfund Memorandum of Agreement
SONS--Spill of National Significance
SSC--Scientific Support Coordinator
SUPSALV--United States Navy Supervisor of Salvage
USFWS--United States Fish and Wildlife Service

Sec. 300.5 Definitions.

Terms not defined in this section have the meaning given by CERCLA, the OPA, or the CWA.

Activation means notification by telephone or other expeditious manner or, when required, the assembly of some or all appropriate members of the RRT or NRT.

Alternative water supplies as defined by section 101(34) of CERCLA, includes, but is not limited to, drinking water and household water supplies.

Applicable requirements means those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under federal **environmental** or state **environmental** or facility siting laws that specifically address a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance found at a CERCLA site. Only those state standards that are identified by a state in a timely manner and that are more stringent than federal requirements may be applicable.

Area Committee (AC) as provided for by CWA sections 311(a)(18) and

(j)(4), means the entity appointed by the President consisting of members from qualified personnel of federal, state, and local agencies with responsibilities that include preparing an area contingency plan for an area designated by the President.

Area contingency plan (ACP) as provided for by CWA sections 311(a)(19) and (j)(4), means the plan prepared by an Area Committee that is developed to be implemented in conjunction with the NCP and RCP, in **part** to address removal of a worst case discharge and to mitigate or prevent a substantial threat of such a discharge from a vessel, offshore facility, or onshore facility operating in or near an area designated by the President.

Bioremediation agents means microbiological cultures, enzyme additives, or nutrient additives that are deliberately introduced into an oil discharge and that will significantly increase the rate of biodegradation to mitigate the effects of the discharge.

Burning agents means those additives that, through physical or chemical means, improve the combustibility of the materials to which they are applied.

CERCLA is the Comprehensive **Environmental** Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986.

CERCLIS is the abbreviation of the CERCLA Information System, EPA's comprehensive data base and management system that inventories and tracks releases addressed or needing to be addressed by the Superfund program. CERCLIS contains the official inventory of CERCLA sites and supports EPA's site planning and tracking functions. Sites that EPA decides do not warrant moving further in the site evaluation process are given a ``No Further Response Action Planned'' (NFRAP) designation in CERCLIS. This means that no additional federal steps under CERCLA will be taken at the site unless future information so warrants. Sites are not removed from the data base after completion of evaluations in order to document that these evaluations took place and to preclude the possibility that they be needlessly repeated. Inclusion of a specific site or area in the CERCLIS data base does not represent a determination of any party's liability, nor does it represent a finding that any response action is necessary. Sites that are deleted from the NPL are not designated NFRAP sites. Deleted sites are listed in a separate category in the CERCLIS data base.

Chemical agents means those elements, compounds, or mixtures that coagulate, disperse, dissolve, emulsify, foam, neutralize, precipitate, reduce, solubilize, oxidize, concentrate, congeal, entrap, fix, make the pollutant mass more rigid or viscous, or otherwise facilitate the mitigation of deleterious effects or the removal of the pollutant from the water. Chemical agents include biological additives, dispersants, sinking agents, miscellaneous oil spill control agents, and burning agents, but do not include sorbents.

Claim for purposes of a release under CERCLA, means a demand in writing for a sum certain; for purposes of a discharge under CWA, it means a request, made in writing for a sum certain, for compensation for damages or removal costs resulting from an incident.

Claimant as defined by section 1001 of the OPA means any person or government who presents a claim for compensation under Title I of the OPA.

Coastal waters for the purposes of classifying the size of discharges, means the waters of the coastal zone except for the Great Lakes and specified ports and harbors on inland rivers.

Coastal zone as defined for the purpose of the NCP, means all United States waters subject to the tide, United States waters of the Great Lakes, specified ports and harbors on inland rivers, waters of

the contiguous zone, other waters of the high seas subject to the NCP, and the land surface or land substrata, ground waters, and ambient air proximal to those waters. The term coastal zone delineates an area of federal responsibility for response action. Precise boundaries are determined by EPA/USCG agreements and identified in federal regional contingency plans.

Coast Guard District Response Group (DRG) as provided for by CWA sections 311(a)(20) and (j)(3), means the entity established by the Secretary of the department in which the USCG is operating, within each USCG district, and shall consist of: the combined USCG personnel and equipment, including marine firefighting equipment, of each port in the district; additional prepositioned response equipment; and a district response advisory team.

Community relations means EPA's program to inform and encourage public participation in the Superfund process and to respond to community concerns. The term ``public'' includes citizens directly affected by the site, other interested citizens or parties, organized groups, elected officials, and potentially responsible parties (PRPs).

Community relations coordinator means lead **agency** staff who work with the OSC/RPM to involve and inform the public about the Superfund process and response actions in accordance with the interactive community relations requirements set forth in the NCP.

Contiguous zone means the zone of the high seas, established by the United States under Article 24 of the Convention on the Territorial Sea and Contiguous Zone, which is contiguous to the territorial sea and which extends nine miles seaward from the outer limit of the territorial sea.

Cooperative agreement is a legal instrument EPA uses to transfer money, property, services, or anything of value to a recipient to accomplish a public purpose in which substantial EPA involvement is anticipated during the performance of the project.

Damages as defined by section 1001 of the OPA means damages specified in section 1002(b) of the Act, and includes the cost of assessing these damages.

Discharge as defined by section 311(a)(2) of the CWA, includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil, but excludes discharges in compliance with a permit under section 402 of the CWA, discharges resulting from circumstances identified and reviewed and made a **part** of the public record with respect to a permit issued or modified under section 402 of the CWA, and subject to a condition in such permit, or continuous or anticipated intermittent discharges from a point source, identified in a permit or permit application under section 402 of the CWA, that are caused by events occurring within the scope of relevant operating or treatment systems. For purposes of the NCP, discharge also means substantial threat of discharge.

Dispersants means those chemical agents that emulsify, disperse, or solubilize oil into the water column or promote the surface spreading of oil slicks to facilitate dispersal of the oil into the water column.

Drinking water supply as defined by section 101(7) of CERCLA, means any raw or finished water source that is or may be used by a public water system (as defined in the Safe Drinking Water Act (42 U.S.C. 300 et seq.) or as drinking water by one or more individuals.

Environment as defined by section 101(8) of CERCLA, means the navigable waters, the waters of the contiguous zone, and the ocean waters of which the natural resources are under the exclusive management authority of the United States under the Magnuson Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.); and any other surface water, ground water, drinking water supply, land surface or

subsurface strata, or ambient air within the United States or under the jurisdiction of the United States.

Exclusive economic zone, as defined by OPA section 1001, means the zone established by Presidential Proclamation Numbered 5030, dated March 10, 1983, including the ocean waters of the areas referred to as ``eastern special areas'' in Article 3(1) of the Agreement between the United States of America and the Union of Soviet Socialist Republics on the Maritime Boundary, signed June 1, 1990.

Facility as defined by section 101(9) of CERCLA, means any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft, or any site or area, where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located; but does not include any consumer product in consumer use or any vessel. As defined by section 1001 of the OPA, it means any structure, group of structures, equipment, or device (other than a vessel) which is used for one or more of the following purposes: Exploring for, drilling for, producing, storing, handling, transferring, processing, or transporting oil. This term includes any motor vehicle, rolling stock, or pipeline used for one or more of these purposes.

Feasibility study (FS) means a study undertaken by the lead **agency** to develop and evaluate options for remedial action. The FS emphasizes data analysis and is generally performed concurrently and in an interactive fashion with the remedial investigation (RI), using data gathered during the RI. The RI data are used to define the objectives of the response action, to develop remedial action alternatives, and to undertake an initial screening and detailed analysis of the alternatives. The term also refers to a report that describes the results of the study.

Federal Radiological Emergency Response Plan (FRERP) means the inter-**agency** agreement for coordinating the response of various agencies, under a variety of statutes, to a large radiological accident. The Lead Federal **Agency** (LFA), defined by the FRERP, activates the FRERP for any peacetime radiological emergency which, based upon its professional judgment, is expected to have a significant radiological effect within the United States, its territories, possessions, or territorial waters and that could require a response by several federal agencies.

Federal Response Plan (FRP) means the agreement signed by 27 federal departments and agencies in April 1987 and developed under the authorities of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7701 et seq.) and the Disaster Relief Act of 1974 (42 U.S.C. 3231 et seq.), as amended by the Stafford Disaster Relief Act of 1988.

First federal official means the first federal representative of a participating **agency** of the National Response Team to arrive at the scene of a discharge or a release. This official coordinates activities under the NCP and may initiate, in consultation with the OSC, any necessary actions until the arrival of the predesignated OSC. A state with primary jurisdiction over a site covered by a cooperative agreement will act in the stead of the first federal official for any incident at the site.

Fund or Trust Fund means the Hazardous Substance Superfund established by section 9507 of the Internal Revenue Code of 1986.

Ground water as defined by section 101(12) of CERCLA, means water in a saturated zone or stratum beneath the surface of land or water.

Hazard Ranking System (HRS) means the method used by EPA to evaluate the relative potential of hazardous substance releases to

cause health or safety problems, or ecological or **environmental** damage.

Hazardous substance as defined by section 101(14) of CERCLA, means: Any substance designated pursuant to section 311(b)(2)(A) of the CWA; any element, compound, mixture, solution, or substance designated pursuant to section 102 of CERCLA; any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (but not including any waste the regulation of which under the Solid Waste Disposal Act (42 U.S.C. 6901 et seq.) has been suspended by Act of Congress); any toxic pollutant listed under section 307(a) of the CWA; any hazardous air pollutant listed under section 112 of the Clean Air Act (42 U.S.C. 7521 et seq.); and any imminently hazardous chemical substance or mixture with respect to which the EPA Administrator has taken action pursuant to section 7 of the Toxic Substances Control Act (15 U.S.C. 2601 et seq.). The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance in the first sentence of this paragraph, and the term does not include natural gas, natural gas liquids, liquified natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

Indian tribe as defined by section 101(36) of CERCLA, means any Indian tribe, band, nation, or other organized group or community, including any Alaska Native village but not including any Alaska Native regional or village corporation, which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians. ``Indian tribe,' ' as defined by OPA section 1001, means any Indian tribe, band, nation, or other organized group or community, but not including any Alaska Native regional or village corporation, which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians and has governmental authority over lands belonging to or controlled by the tribe.

Inland waters, for the purposes of classifying the size of discharges, means those waters of the United States in the inland zone, waters of the Great Lakes, and specified ports and harbors on inland rivers.

Inland zone means the environment inland of the coastal zone excluding the Great Lakes and specified ports and harbors on inland rivers. The term inland zone delineates an area of federal responsibility for response action. Precise boundaries are determined by EPA/USCG agreements and identified in federal regional contingency plans.

Lead administrative trustee means a natural resource trustee who is designated on an incident-by-incident basis for the purpose of preassessment and damage assessment and chosen by the other trustees whose natural resources are affected by the incident. The lead administrative trustee facilitates effective and efficient communication during response operations between the OSC and the other natural resource trustees conducting activities associated with damage assessment, and is responsible for applying to the OSC for access to response operations resources on behalf of all trustees for initiation of a damage assessment.

Lead **agency** means the **agency** that provides the OSC/RPM to plan and implement response actions under the NCP. EPA, the USCG, another federal **agency**, or a state (or political subdivision of a state) operating pursuant to a contract or cooperative agreement executed pursuant to section 104(d)(1) of CERCLA, or designated pursuant to a Superfund Memorandum of Agreement (SMOA) entered into pursuant to subpart F of the NCP or other agreements may be the lead **agency** for a

response action. In the case of a release of a hazardous substance, pollutant, or contaminant, where the release is on, or the sole source of the release is from, any facility or vessel under the jurisdiction, custody, or control of Department of Defense (DOD) or Department of Energy (DOE), then DOD or DOE will be the lead **agency**. Where the release is on, or the sole source of the release is from, any facility or vessel under the jurisdiction, custody, or control of a federal **agency** other than EPA, the USCG, DOD, or DOE, then that **agency** will be the lead **agency** for remedial actions and removal actions other than emergencies. The federal **agency** maintains its lead **agency** responsibilities whether the remedy is selected by the federal **agency** for non-NPL sites or by EPA and the federal **agency** or by EPA alone under CERCLA section 120. The lead **agency** will consult with the support **agency**, if one exists, throughout the response process.

Management of migration means actions that are taken to minimize and mitigate the migration of hazardous substances or pollutants or contaminants and the effects of such migration. Measures may include, but are not limited to, management of a plume of contamination, restoration of a drinking water aquifer, or surface water restoration.

Miscellaneous oil spill control agent is any product, other than a dispersant, sinking agent, surface washing agent, surface collecting agent, bioremediation agent, burning agent, or sorbent that can be used to enhance oil spill cleanup, removal, treatment, or mitigation.

National Pollution Funds Center (NPFC) means the entity established by the Secretary of Transportation whose function is the administration of the Oil Spill Liability Trust Fund (OSLTF). Among the NPFC's duties are: providing appropriate access to the OSLTF for federal agencies and states for removal actions and for federal trustees to initiate the assessment of natural resource damages; providing appropriate access to the OSLTF for claims; and coordinating cost recovery efforts.

National Priorities List (NPL) means the list, compiled by EPA pursuant to CERCLA section 105, of uncontrolled hazardous substance releases in the United States that are priorities for long-term remedial evaluation and response.

National response system (NRS) is the mechanism for coordinating response actions by all levels of government in support of the OSC/RPM. The NRS is composed of the NRT, RRTs, OSC/RPM, Area Committees, and Special Teams and related support entities. The NRS is capable of expanding or contracting to accommodate the response effort required by the size or complexity of the discharge or release.

National Strike Force (NSF) is a special team established by the USCG, including the three USCG Strike Teams, the Public Information Assist Team (PIAT), and the National Strike Force Coordination Center. The NSF is available to assist OSCs/RPMs in their preparedness and response duties.

National Strike Force Coordination Center (NSFCC), authorized as the National Response Unit by CWA sections 311(a)(23) and (j)(2), means the entity established by the Secretary of the department in which the USCG is operating at Elizabeth City, North Carolina with responsibilities that include administration of the USCG Strike Teams, maintenance of response equipment inventories and logistic networks, and conducting a national exercise program.

Natural resources means land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the United States (including the resources of the exclusive economic zone defined by the Magnuson Fishery Conservation and Management Act of 1976), any state or local government, any foreign government, any Indian tribe, or, if such

resources are subject to a trust restriction on alienation, any member of an Indian tribe.

Navigable waters as defined by **40 CFR 110.1**, means the waters of the United States, including the territorial seas. The term includes:

(1) All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;

(2) Interstate waters, including interstate wetlands;

(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, and wetlands, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters;

(i) That are or could be used by interstate or foreign travelers for recreational or other purposes;

(ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce;

(iii) That are used or could be used for industrial purposes by industries in interstate commerce;

(4) All impoundments of waters otherwise defined as navigable waters under this section;

(5) Tributaries of waters identified in paragraphs (a) through (d) of this definition, including adjacent wetlands; and

(6) Wetlands adjacent to waters identified in paragraphs (a) through (e) of this definition: Provided, that waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not waters of the United States.

(7) Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal **agency**, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

Offshore facility as defined by section 101(17) of CERCLA and section 311(a)(11) of the CWA, means any facility of any kind located in, on, or under any of the navigable waters of the United States, and any facility of any kind which is subject to the jurisdiction of the United States and is located in, on, or under any other waters, other than a vessel or a public vessel.

Oil as defined by section 311(a)(1) of the CWA, means oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil. Oil, as defined by section 1001 of the OPA means oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil, but does not include petroleum, including crude oil or any fraction thereof, which is specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of section 101(14) of the Comprehensive **Environmental** Response, Compensation, and Liability Act (42 U.S.C. 9601) and which is subject to the provisions of that Act.

Oil Spill Liability Trust Fund (OSLTF) means the fund established under section 9509 of the Internal Revenue Code of 1986 (26 U.S.C. 9509).

On-scene coordinator (OSC) means the federal official predesignated by EPA or the USCG to coordinate and direct responses under subpart D, or the government official designated by the lead **agency** to coordinate and direct removal actions under subpart E of the NCP.

Onshore facility as defined by section 101(18) of CERCLA, means any facility (including, but not limited to, motor vehicles and rolling stock) of any kind located in, on, or under any land or non-navigable waters within the United States; and, as defined by section 311(a)(10)

of the CWA, means any facility (including, but not limited to, motor vehicles and rolling stock) of any kind located in, on, or under any land within the United States other than submerged land.

On-site means the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of the response action.

Operable unit means a discrete action that comprises an incremental step toward comprehensively addressing site problems. This discrete portion of a remedial response manages migration, or eliminates or mitigates a release, threat of a release, or pathway of exposure. The cleanup of a site can be divided into a number of operable units, depending on the complexity of the problems associated with the site. Operable units may address geographical portions of a site, specific site problems, or initial phases of an action, or may consist of any set of actions performed over time or any actions that are concurrent but located in different parts of a site.

Operation and maintenance (O&M) means measures required to maintain the effectiveness of response actions.

Person as defined by section 101(21) of CERCLA, means an individual, firm, corporation, association, partnership, consortium, joint venture, commercial entity, United States government, state, municipality, commission, political subdivision of a state, or any interstate body. As defined by section 1001 of the OPA, ``person'' means an individual, corporation, partnership, association, state, municipality, commission, or political subdivision of a state, or any interstate body.

Pollutant or contaminant as defined by section 101(33) of CERCLA, shall include, but not be limited to, any element, substance, compound, or mixture, including disease-causing agents, which after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions (including malfunctions in reproduction) or physical deformations, in such organisms or their offspring. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under section 101(14) (A) through (F) of CERCLA, nor does it include natural gas, liquified natural gas, or synthetic gas of pipeline quality (or mixtures of natural gas and such synthetic gas). For purposes of the NCP, the term pollutant or contaminant means any pollutant or contaminant that may present an imminent and substantial danger to public health or welfare of the United States.

Post-removal site control means those activities that are necessary to sustain the integrity of a Fund-financed removal action following its conclusion. Post-removal site control may be a removal or remedial action under CERCLA. The term includes, without being limited to, activities such as relighting gas flares, replacing filters, and collecting leachate.

Preliminary assessment (PA) under CERCLA means review of existing information and an off-site reconnaissance, if appropriate, to determine if a release may require additional investigation or action. A PA may include an on-site reconnaissance, if appropriate.

Public participation, see the definition for community relations.

Public vessel as defined by section 311(a)(4) of the CWA, means a vessel owned or bareboat-chartered and operated by the United States, or by a state or political subdivision thereof, or by a foreign nation, except when such vessel is engaged in commerce.

Quality assurance project plan (QAPP) is a written document,

associated with all remedial site sampling activities, which presents in specific terms the organization (where applicable), objectives, functional activities, and specific quality assurance (QA) and quality control (QC) activities designed to achieve the data quality objectives of a specific project(s) or continuing operation(s). The QAPP is prepared for each specific project or continuing operation (or group of similar projects or continuing operations). The QAPP will be prepared by the responsible program office, regional office, laboratory, contractor, recipient of an assistance agreement, or other organization. For an enforcement action, potentially responsible parties may prepare a QAPP subject to lead **agency** approval.

Release as defined by section 101(22) of CERCLA, means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant), but excludes: Any release which results in exposure to persons solely within a workplace, with respect to a claim which such persons may assert against the employer of such persons; emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station engine; release of source, byproduct, or special nuclear material from a nuclear incident, as those terms are defined in the Atomic Energy Act of 1954, if such release is subject to requirements with respect to financial **protection** established by the Nuclear Regulatory Commission under section 170 of such Act, or, for the purposes of section 104 of CERCLA or any other response action, any release of source, byproduct, or special nuclear material from any processing site designated under section 102(a)(1) or 302(a) of the Uranium Mill Tailings Radiation Control Act of 1978 (42 U.S.C. 7901 et seq.); and the normal application of fertilizer. For purposes of the NCP, release also means threat of release.

Relevant and appropriate requirements means those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under federal **environmental** or state **environmental** or facility siting laws that, while not ``applicable'' to a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a CERCLA site, address problems or situations sufficiently similar to those encountered at the CERCLA site that their use is well suited to the particular site. Only those state standards that are identified in a timely manner and are more stringent than federal requirements may be relevant and appropriate.

Remedial design (RD) means the technical analysis and procedures which follow the selection of remedy for a site and result in a detailed set of plans and specifications for implementation of the remedial action.

Remedial investigation (RI) is a process undertaken by the lead **agency** to determine the nature and extent of the problem presented by the release. The RI emphasizes data collection and site characterization, and is generally performed concurrently and in an interactive fashion with the feasibility study. The RI includes sampling and monitoring, as necessary, and includes the gathering of sufficient information to determine the necessity for remedial action and to support the evaluation of remedial alternatives.

Remedial project manager (RPM) means the official designated by the lead **agency** to coordinate, monitor, or direct remedial or other response actions under subpart E of the NCP.

Remedy or remedial action (RA) means those actions consistent with permanent remedy taken instead of, or in addition to, removal action in

the event of a release or threatened release of a hazardous substance into the environment, to prevent or minimize the release of hazardous substances so that they do not migrate to cause substantial danger to present or future public health or welfare or the environment. The term includes, but is not limited to, such actions at the location of the release as storage, confinement, perimeter **protection** using dikes, trenches, or ditches, clay cover, neutralization, cleanup of released hazardous substances and associated contaminated materials, recycling or reuse, diversion, destruction, segregation of reactive wastes, dredging or excavations, repair or replacement of leaking containers, collection of leachate and runoff, on-site treatment or incineration, provision of alternative water supplies, any monitoring reasonably required to assure that such actions protect the public health and welfare and the environment and, where appropriate, post-removal site control activities. The term includes the costs of permanent relocation of residents and businesses and community facilities (including the cost of providing ``alternative land of equivalent value'' to an Indian tribe pursuant to CERCLA section 126(b)) where EPA determines that, alone or in combination with other measures, such relocation is more cost-effective than, and environmentally preferable to, the transportation, storage, treatment, destruction, or secure disposition off-site of such hazardous substances, or may otherwise be necessary to protect the public health or welfare; the term includes off-site transport and off-site storage, treatment, destruction, or secure disposition of hazardous substances and associated contaminated materials. For the purpose of the NCP, the term also includes enforcement activities related thereto.

Remove or removal as defined by section 311(a)(8) of the CWA, refers to containment and removal of oil or hazardous substances from the water and shorelines or the taking of such other actions as may be necessary to minimize or mitigate damage to the public health or welfare of the United States (including, but not limited to, fish, shellfish, wildlife, public and private property, and shorelines and beaches) or to the environment. For the purpose of the NCP, the term also includes monitoring of action to remove a discharge. As defined by section 101(23) of CERCLA, remove or removal means the cleanup or removal of released hazardous substances from the environment; such actions as may be necessary taken in the event of the threat of release of hazardous substances into the environment; such actions as may be necessary to monitor, assess, and evaluate the release or threat of release of hazardous substances; the disposal of removed material; or the taking of such other actions as may be necessary to prevent, minimize, or mitigate damage to the public health or welfare of the United States or to the environment, which may otherwise result from a release or threat of release. The term includes, in addition, without being limited to, security fencing or other measures to limit access, provision of alternative water supplies, temporary evacuation and housing of threatened individuals not otherwise provided for, action taken under section 104(b) of CERCLA, post-removal site control, where appropriate, and any emergency assistance which may be provided under the Disaster Relief Act of 1974. For the purpose of the NCP, the term also includes enforcement activities related thereto.

Removal costs as defined by section 1001 of the OPA means the costs of removal that are incurred after a discharge of oil has occurred, or in any case in which there is a substantial threat of a discharge of oil, the costs to prevent, minimize, or mitigate oil pollution from such an incident.

Respond or response as defined by section 101(25) of CERCLA, means remove, removal, remedy, or remedial action, including enforcement

activities related thereto.

Responsible party as defined by section 1001 of the OPA, means the following:

(1) Vessels--In the case of a vessel, any person owning, operating, or demise chartering the vessel.

(2) Onshore Facilities--In the case of an onshore facility (other than a pipeline), any person owning or operating the facility, except a federal **agency**, state, municipality, commission, or political subdivision of a state, or any interstate body, that as the owner transfers possession and right to use the property to another person by lease, assignment, or permit.

(3) Offshore Facilities--In the case of an offshore facility (other than a pipeline or a deepwater port licensed under the Deepwater Port Act of 1974 (33 U.S.C. 1501 et seq.)), the lessee or permittee of the area in which the facility is located or the holder of a right of use and easement granted under applicable state law or the Outer Continental Shelf Lands Act (43 U.S.C. 1301-1356) for the area in which the facility is located (if the holder is a different person than the lessee or permittee), except a federal **agency**, state, municipality, commission, or political subdivision of a state, or any interstate body, that as owner transfers possession and right to use the property to another person by lease, assignment, or permit.

(4) Deepwater Ports--In the case of a deepwater port licensed under the Deepwater Port Act of 1974 (33 U.S.C. 1501-1524), the licensee.

(5) Pipelines--In the case of a pipeline, any person owning or operating the pipeline.

(6) Abandonment--In the case of an abandoned vessel, onshore facility, deepwater port, pipeline, or offshore facility, the person who would have been responsible parties immediately prior to the abandonment of the vessel or facility.

SARA is the Superfund Amendments and Reauthorization Act of 1986. In addition to certain free-standing provisions of law, it includes amendments to CERCLA, the Solid Waste Disposal Act, and the Internal Revenue Code. Among the free-standing provisions of law is Title III of SARA, also known as the ``Emergency Planning and Community Right-to-Know Act of 1986'' and Title IV of SARA, also known as the ``Radon Gas and Indoor Air Quality Research Act of 1986.'' Title V of SARA amending the Internal Revenue Code is also known as the ``Superfund Revenue Act of 1986.''

Sinking agents means those additives applied to oil discharges to sink floating pollutants below the water surface.

Site inspection (SI) means an on-site investigation to determine whether there is a release or potential release and the nature of the associated threats. The purpose is to augment the data collected in the preliminary assessment and to generate, if necessary, sampling and other field data to determine if further action or investigation is appropriate.

Size classes of discharges refers to the following size classes of oil discharges which are provided as guidance to the OSC and serve as the criteria for the actions delineated in subpart D. They are not meant to imply associated degrees of hazard to public health or welfare of the United States, nor are they a measure of **environmental** injury. Any oil discharge that poses a substantial threat to public health or welfare of the United States or the environment or results in significant public concern shall be classified as a major discharge regardless of the following quantitative measures:

(1) Minor discharge means a discharge to the inland waters of less than 1,000 gallons of oil or a discharge to the coastal waters of less than 10,000 gallons of oil.

(2) Medium discharge means a discharge of 1,000 to 10,000 gallons of oil to the inland waters or a discharge of 10,000 to 100,000 gallons of oil to the coastal waters.

(3) Major discharge means a discharge of more than 10,000 gallons of oil to the inland waters or more than 100,000 gallons of oil to the coastal waters.

Size classes of releases refers to the following size classifications which are provided as guidance to the OSC for meeting pollution reporting requirements in subpart B. The final determination of the appropriate classification of a release will be made by the OSC based on consideration of the particular release (e.g., size, location, impact, etc.):

(1) Minor release means a release of a quantity of hazardous substance(s), pollutant(s), or contaminant(s) that poses minimal threat to public health or welfare of the United States or the environment.

(2) Medium release means a release not meeting the criteria for classification as a minor or major release.

(3) Major release means a release of any quantity of hazardous substance(s), pollutant(s), or contaminant(s) that poses a substantial threat to public health or welfare of the United States or the environment or results in significant public concern.

Sorbents means essentially inert and insoluble materials that are used to remove oil and hazardous substances from water through adsorption, in which the oil or hazardous substance is attracted to the sorbent surface and then adheres to it; absorption, in which the oil or hazardous substance penetrates the pores of the sorbent material; or a combination of the two. Sorbents are generally manufactured in particulate form for spreading over an oil slick or as sheets, rolls, pillows, or booms. The sorbent material may consist of, but is not limited to, the following materials:

(1) Organic products--

(i) Peat moss or straw;

(ii) Cellulose fibers or cork;

(iii) Corn cobs;

(iv) Chicken, duck, or other bird feathers.

(2) Mineral compounds--

(i) Volcanic ash or perlite;

(ii) Vermiculite or zeolite.

(3) Synthetic products--

(i) Polypropylene;

(ii) Polyethylene;

(iii) Polyurethane;

(iv) Polyester.

Source control action is the construction or installation and start-up of those actions necessary to prevent the continued release of hazardous substances or pollutants or contaminants (primarily from a source on top of or within the ground, or in buildings or other structures) into the environment.

Source control maintenance measures are those measures intended to maintain the effectiveness of source control actions once such actions are operating and functioning properly, such as the maintenance of landfill caps and leachate collection systems.

Specified ports and harbors means those ports and harbor areas on inland rivers, and land areas immediately adjacent to those waters, where the USCG acts as predesignated on-scene coordinator. Precise locations are determined by EPA/USCG regional agreements and identified in federal Regional Contingency Plans and Area Contingency Plans.

Spill of national significance (SONS) means a spill that due to its severity, size, location, actual or potential impact on the public health and welfare or the environment, or the necessary response

effort, is so complex that it requires extraordinary coordination of federal, state, local, and responsible party resources to contain and clean up the discharge.

State means the several states of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the U.S. Virgin Islands, the Commonwealth of the Northern Marianas, and any other territory or possession over which the United States has jurisdiction. For purposes of the NCP, the term includes Indian tribes as defined in the NCP except where specifically noted. Section 126 of CERCLA provides that the governing body of an Indian tribe shall be afforded substantially the same treatment as a state with respect to certain provisions of CERCLA. Section 300.515(b) of the NCP describes the requirements pertaining to Indian tribes that wish to be treated as states under CERCLA.

Superfund Memorandum of Agreement (SMOA) means a nonbinding, written document executed by an EPA Regional Administrator and the head of a state **agency** that may establish the nature and extent of EPA and state interaction during the removal, pre-remedial, remedial, and/or enforcement response process. The SMOA is not a site-specific document although attachments may address specific sites. The SMOA generally defines the role and responsibilities of both the lead and the support agencies.

Superfund state contract is a joint, legally binding agreement between EPA and a state to obtain the necessary assurances before a federal-lead remedial action can begin at a site. In the case of a political subdivision-lead remedial response, a three-party Superfund state contract among EPA, the state, and political subdivision thereof, is required before a political subdivision takes the lead for any phase of remedial response to ensure state involvement pursuant to section 121(f)(1) of CERCLA. The Superfund state contract may be amended to provide the state's CERCLA section 104 assurances before a political subdivision can take the lead for remedial action.

Support **agency** means the **agency** or agencies that provide the support **agency** coordinator to furnish necessary data to the lead **agency**, review response data and documents, and provide other assistance as requested by the OSC or RPM. EPA, the USCG, another federal **agency**, or a state may be support agencies for a response action if operating pursuant to a contract executed under section 104(d)(1) of CERCLA or designated pursuant to a Superfund Memorandum of Agreement entered into pursuant to subpart F of the NCP or other agreement. The support **agency** may also concur on decision documents.

Support **agency** coordinator (SAC) means the official designated by the support **agency**, as appropriate, to interact and coordinate with the lead **agency** in response actions under subpart E of this **part**.

Surface collecting agents means those chemical agents that form a surface film to control the layer thickness of oil.

Surface washing agent is any product that removes oil from solid surfaces, such as beaches and rocks, through a detergency mechanism and does not involve dispersing or solubilizing the oil into the water column.

Tank vessel as defined by section 1001 of the OPA means a vessel that is constructed or adapted to carry, or that carries oil or hazardous material in bulk as cargo or cargo residue, and that:

- (1) is a vessel of the United States;
- (2) operates on the navigable waters; or
- (3) transfers oil or hazardous material in a place subject to the jurisdiction of the United States.

Threat of discharge or release, see definitions for discharge and release.

Threat of release, see definition for release.

Treatment technology means any unit operation or series of unit operations that alters the composition of a hazardous substance or pollutant or contaminant through chemical, biological, or physical means so as to reduce toxicity, mobility, or volume of the contaminated materials being treated. Treatment technologies are an alternative to land disposal of hazardous wastes without treatment.

Trustee means an official of a federal natural resources management **agency** designated in subpart G of the NCP or a designated state official or Indian tribe or, in the case of discharges covered by the OPA, a foreign government official, who may pursue claims for damages under section 107(f) of CERCLA or section 1006 of the OPA.

United States when used in relation to section 311(a)(5) of the CWA, means the states, the District of Columbia, the Commonwealth of Puerto Rico, the Northern Mariana Islands, Guam, American Samoa, the United States Virgin Islands, and the Pacific Island Governments. United States, when used in relation to section 101(27) of CERCLA and section 1001(36) of the OPA, includes the several states of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Commonwealth of the Northern Marianas, and any other territory or possession over which the United States has jurisdiction.

Vessel as defined by section 101(28) of CERCLA, means every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water; and, as defined by section 311(a)(3) of the CWA, means every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water other than a public vessel.

Volunteer means any individual accepted to perform services by the lead **agency** which has authority to accept volunteer services (examples: See 16 U.S.C. 742f(c)). A volunteer is subject to the provisions of the authorizing statute and the NCP.

Worst case discharge as defined by section 311(a)(24) of the CWA, means, in the case of a vessel, a discharge in adverse weather conditions of its entire cargo, and, in the case of an offshore facility or onshore facility, the largest foreseeable discharge in adverse weather conditions.

Sec. 300.6 Use of number and gender.

As used in this regulation, words in the singular also include the plural and words in the masculine gender also include the feminine and vice versa, as the case may require.

Sec. 300.7 Computation of time.

In computing any period of time prescribed or allowed in these rules of practice, except as otherwise provided, the day of the event from which the designated period begins to run shall not be included. Saturdays, Sundays, and federal legal holidays shall be included. When a stated time expires on a Saturday, Sunday, or legal holiday, the stated time period shall be extended to include the next business day.

Subpart B--Responsibility and Organization for Response

Sec. 300.100 Duties of President delegated to federal agencies.

In Executive Orders 12580 and 12777, the President delegated

certain functions and responsibilities vested in him by the CWA, CERCLA, and the OPA.

Sec. 300.105 General organization concepts.

(a) Federal agencies should:

(1) Plan for emergencies and develop procedures for addressing oil discharges and releases of hazardous substances, pollutants, or contaminants;

(2) Coordinate their planning, preparedness, and response activities with one another;

(3) Coordinate their planning, preparedness, and response activities with affected states, local governments, and private entities; and

(4) Make available those facilities or resources that may be useful in a response situation, consistent with **agency** authorities and capabilities.

(b) Three fundamental kinds of activities are performed pursuant to the NCP:

(1) Preparedness planning and coordination for response to a discharge of oil or release of a hazardous substance, pollutant, or contaminant;

(2) Notification and communications; and

(3) Response operations at the scene of a discharge or release.

(c) The organizational elements created to perform these activities are:

(1) The NRT, responsible for national response and preparedness planning, for coordinating regional planning, and for providing policy guidance and support to the Regional Response Teams (RRTs). NRT membership consists of representatives from the agencies specified in Sec. 300.175(b).

(2) RRTs, responsible for regional planning and preparedness activities before response actions, and for providing advice and support to the OSC or RPM when activated during a response. RRT membership consists of designated representatives from each federal **agency** participating in the NRT together with state and (as agreed upon by the states) local government representatives.

(3) The OSC and the RPM, primarily responsible for directing response efforts and coordinating all other efforts at the scene of a discharge or release. The other responsibilities of OSCs and RPMs are described in Sec. 300.135.

(4) Area Committees, responsible for developing, under direction of the OSC, ACPs for each area designated by the President. Responsibilities of Area Committees are described in Sec. 300.205(c).

(d) The basic framework for the response management structure is a system (e.g., a unified command system) that brings together the functions of the Federal Government, the state government, and the responsible party to achieve an effective and efficient response, where the OSC maintains authority.

(e)(1) The organizational concepts of the national response system are depicted in the following Figures 1a and 1b:

BILLING CODE 6560-50-P

<GRAPHIC><TIFF>TR15SE94.000

<GRAPHIC><TIF1>TR15SE94.001

BILLING CODE 6560-50-C

(2) The standard federal regional boundaries (which are also the geographic areas of responsibility for the RRTs) are shown in the following Figure 2:

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<GRAPHIC><TIF2>TR15SE94.002

BILLING CODE 6560-50-C

(3) The USCG District boundaries are shown in the following Figure 3:

BILLING CODE 6560-50-P

<GRAPHIC><TIF3>TR15SE94.003

BILLING CODE 6560-50-C

Sec. 300.110 National Response Team.

National planning and coordination is accomplished through the NRT.

(a) The NRT consists of representatives from the agencies named in Sec. 300.175(b). Each **agency** shall designate a member to the team and sufficient alternates to ensure representation, as **agency** resources permit. The NRT will consider requests for membership on the NRT from other agencies. Other agencies may request membership by forwarding such requests to the chair of the NRT.

(b) The chair of the NRT shall be the representative of EPA and the vice chair shall be the representative of the USCG, with the exception of periods of activation because of response action. During activation, the chair shall be the member **agency** providing the OSC/RPM. The vice chair shall maintain records of NRT activities along with national, regional, and area plans for response actions.

(c) While the NRT desires to achieve a consensus on all matters brought before it, certain matters may prove unresolvable by this means. In such cases, each **agency** serving as a participating **agency** on the NRT may be accorded one vote in NRT proceedings.

(d) The NRT may establish such bylaws and committees as it deems appropriate to further the purposes for which it is established.

(e) The NRT shall evaluate methods of responding to discharges or releases; shall recommend any changes needed in the response organization; and shall recommend to the Administrator of EPA changes to the NCP designed to improve the effectiveness of the national response system, including drafting of regulatory language.

(f) The NRT shall provide policy and program direction to the RRTs.

(g) The NRT may consider and make recommendations to appropriate agencies on the training, equipping, and **protection** of response teams and necessary research, development, demonstration, and evaluation to improve response capabilities.

(h) Direct planning and preparedness responsibilities of the NRT include:

(1) Maintaining national preparedness to respond to a major

discharge of oil or release of a hazardous substance, pollutant, or contaminant that is beyond regional capabilities;

(2) Publishing guidance documents for preparation and implementation of SARA Title III local emergency response plans;

(3) Monitoring incoming reports from all RRTs and activating for a response action, when necessary;

(4) Coordinating a national program to assist member agencies in preparedness planning and response, and enhancing coordination of member **agency** preparedness programs;

(5) Developing procedures, in coordination with the NSFCC, as appropriate, to ensure the coordination of federal, state, and local governments, and private response to oil discharges and releases of hazardous substances, pollutants, or contaminants;

(6) Monitoring response-related research and development, testing, and evaluation activities of NRT agencies to enhance coordination, avoid duplication of effort, and facilitate research in support of response activities;

(7) Developing recommendations for response training and for enhancing the coordination of available resources among agencies with training responsibilities under the NCP;

(8) Reviewing regional responses to oil discharges and hazardous substance, pollutant, or contaminant releases, including an evaluation of equipment readiness and coordination among responsible public agencies and private organizations; and

(9) Assisting in developing a national exercise program, in coordination with the NSFCC, to ensure preparedness and coordination nationwide.

(i) The NRT will consider matters referred to it for advice or resolution by an RRT.

(j) The NRT should be activated as an emergency response team:

(1) When an oil discharge or hazardous substance release:

(i) Exceeds the response capability of the region in which it occurs;

(ii) Transects regional boundaries; or

(iii) Involves a substantial threat to the public health or welfare of the United States or the environment, substantial amounts of property, or substantial threats to natural resources;

(2) If requested by any NRT member.

(k) When activated for a response action, the NRT shall meet at the call of the chair and may:

(1) Monitor and evaluate reports from the OSC/RPM and recommend to the OSC/RPM, through the RRT, actions to combat the discharge or release;

(2) Request other federal, state, and local governments, or private agencies, to provide resources under their existing authorities to combat a discharge or release, or to monitor response operations; and

(3) Coordinate the supply of equipment, personnel, or technical advice to the affected region from other regions or districts.

Sec. 300.115 Regional Response Teams.

(a) Regional planning and coordination of preparedness and response actions is accomplished through the RRT. In the case of a discharge of oil, preparedness activities will be carried out in conjunction with Area Committees, as appropriate. The RRT **agency** membership parallels that of the NRT, as described in Sec. 300.110, but also includes state and local representation. The RRT provides:

(1) The appropriate regional mechanism for development and

coordination of preparedness activities before a response action is taken and for coordination of assistance and advice to the OSC/RPM during such response actions; and

(2) Guidance to Area Committees, as appropriate, to ensure inter-area consistency and consistency of individual ACPs with the RCP and NCP.

(b) The two principal components of the RRT mechanism are a standing team, which consists of designated representatives from each participating federal **agency**, state governments, and local governments (as agreed upon by the states); and incident-specific teams formed from the standing team when the RRT is activated for a response. On incident-specific teams, participation by the RRT member agencies will relate to the technical nature of the incident and its geographic location.

(1) The standing team's jurisdiction corresponds to the standard federal regions, except for Alaska, Oceania in the Pacific, and the Caribbean area, each of which has a separate standing RRT. The role of the standing RRT includes communications systems and procedures, planning, coordination, training, evaluation, preparedness, and related matters on a regionwide basis. It also includes coordination of Area Committees for these functions in areas within their respective regions, as appropriate.

(2) The role of the incident-specific team is determined by the operational requirements of the response to a specific discharge or release. Appropriate levels of activation and/or notification of the incident-specific RRT, including participation by state and local governments, shall be determined by the designated RRT chair for the incident, based on the RCP. The incident-specific RRT supports the designated OSC/RPM. The designated OSC/RPM directs response efforts and coordinates all other efforts at the scene of a discharge or release.

(c) The representatives of EPA and the USCG shall act as co-chairs of RRTs except when the RRT is activated. When the RRT is activated for response actions, the chair shall be the member **agency** providing the OSC/RPM.

(d) Each participating **agency** should designate one member and at least one alternate member to the RRT. Agencies whose regional subdivisions do not correspond to the standard federal regions may designate additional representatives to the standing RRT to ensure appropriate coverage of the standard federal region. Participating states may also designate one member and at least one alternate member to the RRT. Indian tribal governments may arrange for representation with the RRT appropriate to their geographical location. All agencies and states may also provide additional representatives as observers to meetings of the RRT.

(e) RRT members should designate representatives and alternates from their agencies as resource personnel for RRT activities, including RRT work planning, and membership on incident-specific teams in support of the OSCs/RPMs.

(f) Federal RRT members or their representatives should provide OSCs/RPMs with assistance from their respective federal agencies commensurate with **agency** responsibilities, resources, and capabilities within the region. During a response action, the members of the RRT should seek to make available the resources of their agencies to the OSC/RPM as specified in the RCP and ACP.

(g) RRT members should nominate appropriately qualified representatives from their agencies to work with OSCs in developing and maintaining ACPs.

(h) Affected states are encouraged to participate actively in all RRT activities. Each state governor is requested to assign an office or

agency to represent the state on the appropriate RRT; to designate representatives to work with the RRT in developing RCPs; to plan for, make available, and coordinate state resources; and to serve as the contact point for coordination of response with local government agencies, whether or not represented on the RRT. The state's RRT representative should keep the State Emergency Response Commission (SERC), described in Sec. 300.205(d), apprised of RRT activities and coordinate RRT activities with the SERC. Local governments are invited to participate in activities on the appropriate RRT as provided by state law or as arranged by the state's representative. Indian tribes are also invited to participate in such activities.

(i) The standing RRT shall recommend changes in the regional response organization as needed, revise the RCP as needed, evaluate the preparedness of the participating agencies and the effectiveness of ACPs for the federal response to discharges and releases, and provide technical assistance for preparedness to the response community. The RRT should:

(1) Review and comment, to the extent practicable, on local emergency response plans or other issues related to the preparation, implementation, or exercise of such plans upon request of a local emergency planning committee;

(2) Evaluate regional and local responses to discharges or releases on a continuing basis, considering available legal remedies, equipment readiness, and coordination among responsible public agencies and private organizations, and recommend improvements;

(3) Recommend revisions of the NCP to the NRT, based on observations of response operations;

(4) Review OSC actions to ensure that RCPs and ACPs are effective;

(5) Encourage the state and local response community to improve its preparedness for response;

(6) In coordination with Area Committees and in accordance with any applicable laws, regulations, or requirements, conduct advance planning for use of dispersants, surface washing agents, surface collecting agents, burning agents, bioremediation agents, or other chemical agents in accordance with subpart J of this **part**;

(7) Be prepared to provide response resources to major discharges or releases outside the region;

(8) Conduct or participate in training and exercises as necessary to encourage preparedness activities of the response community within the region;

(9) Meet at least semiannually to review response actions carried out during the preceding period, consider changes in RCPs, and recommend changes in ACPs;

(10) Provide letter reports on RRT activities to the NRT twice a year, no later than January 31 and July 31. At a minimum, reports should summarize recent activities, organizational changes, operational concerns, and efforts to improve state and local coordination; and

(11) Ensure maximum participation in the national exercise program for announced and unannounced exercises.

(j)(1) The RRT may be activated by the chair as an incident-specific response team when a discharge or release:

(i) Exceeds the response capability available to the OSC/RPM in the place where it occurs;

(ii) Transects state boundaries;

(iii) May pose a substantial threat to the public health or welfare of the United States or the environment, or to regionally significant amounts of property; or

(iv) Is a worst case discharge, as described in Sec. 300.324. RCPs shall specify detailed criteria for activation of RRTs.

(2) The RRT will be activated during any discharge or release upon a request from the OSC/RPM, or from any RRT representative, to the chair of the RRT. Requests for RRT activation shall later be confirmed in writing. Each representative, or an appropriate alternate, should be notified immediately when the RRT is activated.

(3) During prolonged removal or remedial action, the RRT may not need to be activated or may need to be activated only in a limited sense, or may need to have available only those member agencies of the RRT who are directly affected or who can provide direct response assistance.

(4) When the RRT is activated for a discharge or release, **agency** representatives shall meet at the call of the chair and may:

(i) Monitor and evaluate reports from the OSC/RPM, advise the OSC/RPM on the duration and extent of response, and recommend to the OSC/RPM specific actions to respond to the discharge or release;

(ii) Request other federal, state, or local governments, or private agencies, to provide resources under their existing authorities to respond to a discharge or release or to monitor response operations;

(iii) Help the OSC/RPM prepare information releases for the public and for communication with the NRT;

(iv) If the circumstances warrant, make recommendations to the regional or district head of the **agency** providing the OSC/RPM that a different OSC/RPM should be designated; and

(v) Submit pollution reports to the NRC as significant developments occur.

(5) At the regional level, a Regional Response Center (RRC) may provide facilities and personnel for communications, information storage, and other requirements for coordinating response. The location of each RRC should be provided in the RCP.

(6) When the RRT is activated, affected states may participate in all RRT deliberations. State government representatives participating in the RRT have the same status as any federal member of the RRT.

(7) The RRT can be deactivated when the incident-specific RRT chair determines that the OSC/RPM no longer requires RRT assistance.

(8) Notification of the RRT may be appropriate when full activation is not necessary, with systematic communication of pollution reports or other means to keep RRT members informed as to actions of potential concern to a particular **agency**, or to assist in later RRT evaluation of nationwide response effectiveness.

(k) Whenever there is insufficient national policy guidance on a matter before the RRT, a technical matter requiring solution, a question concerning interpretation of the NCP, or a disagreement on discretionary actions among RRT members that cannot be resolved at the regional level, it may be referred to the NRT, described in Sec. 300.110, for advice.

Sec. 300.120 On-scene coordinators and remedial project managers: general responsibilities.

(a) The OSC/RPM directs response efforts and coordinates all other efforts at the scene of a discharge or release. As **part** of the planning and preparedness for response, OSCs shall be predesignated by the regional or district head of the lead **agency**. EPA and the USCG shall predesignate OSCs for all areas in each region, except as provided in paragraphs (c) and (d) of this section. RPMs shall be assigned by the lead **agency** to manage remedial or other response actions at NPL sites, except as provided in paragraphs (c) and (d) of this section.

(1) The USCG shall provide OSCs for oil discharges, including

discharges from facilities and vessels under the jurisdiction of another federal **agency**, within or threatening the coastal zone. The USCG shall also provide OSCs for the removal of releases of hazardous substances, pollutants, or contaminants into or threatening the coastal zone, except as provided in paragraph (b) of this section. The USCG shall not provide predesignated OSCs for discharges or releases from hazardous waste management facilities or in similarly chronic incidents. The USCG shall provide an initial response to discharges or releases from hazardous waste management facilities within the coastal zone in accordance with Department of Transportation (DOT)/EPA Instrument of Delegation (May 27, 1988) except as provided by paragraph (b) of this section. The USCG OSC shall contact the cognizant RPM as soon as it is evident that a removal may require a follow-up remedial action, to ensure that the required planning can be initiated and an orderly transition to an EPA or state lead can occur.

(2) EPA shall provide OSCs for discharges or releases into or threatening the inland zone and shall provide RPMs for federally funded remedial actions, except in the case of state-lead federally funded response and as provided in paragraph (b) of this section. EPA will also assume all remedial actions at NPL sites in the coastal zone, even where removals are initiated by the USCG, except as provided in paragraph (b) of this section.

(b) In general, USCG Captains of the Port (COTP) shall serve as the designated OSCs for areas in the coastal zone for which an ACP is required under CWA section 311(j) and EPA Regional Administrators shall designate OSCs for areas in the inland zone for which an ACP is required under CWA section 311(j).

(c) For releases of hazardous substances, pollutants, or contaminants, when the release is on, or the sole source of the release is from, any facility or vessel, including vessels bareboat-chartered and operated, under the jurisdiction, custody, or control of DOD, DOE, or other federal **agency**:

(1) In the case of DOD or DOE, DOD or DOE shall provide OSCs/RPMs responsible for taking all response actions; and

(2) In the case of a federal **agency** other than EPA, DOD, or DOE, such **agency** shall provide OSCs for all removal actions that are not emergencies and shall provide RPMs for all remedial actions.

(d) DOD will be the removal response authority with respect to incidents involving DOD military weapons and munitions or weapons and munitions under the jurisdiction, custody, or control of DOD.

(e) The OSC is responsible for overseeing development of the ACP in the area of the OSC's responsibility. ACPs shall, as appropriate, be accomplished in cooperation with the RRT, and designated state and local representatives. In contingency planning and removal, the OSC coordinates, directs, and reviews the work of other agencies, Area Committees, responsible parties, and contractors to assure compliance with the NCP, decision document, consent decree, administrative order, and lead **agency**-approved plans applicable to the response.

(f) The RPM is the prime contact for remedial or other response actions being taken (or needed) at sites on the proposed or promulgated NPL, and for sites not on the NPL but under the jurisdiction, custody, or control of a federal **agency**. The RPM's responsibilities include:

(1) Fund-financed response: The RPM coordinates, directs, and reviews the work of EPA, states and local governments, the U.S. Army Corps of Engineers, and all other agencies and contractors to assure compliance with the NCP. Based upon the reports of these parties, the RPM recommends action for decisions by lead **agency** officials. The RPM's period of responsibility begins prior to initiation of the remedial investigation/feasibility study (RI/FS), described in Sec. 300.430, and

continues through design, remedial action, deletion of the site from the NPL, and the CERCLA cost recovery activity. When a removal and remedial action occur at the same site, the OSC and RPM should coordinate to ensure an orderly transition of responsibility.

(2) Federal-lead non-Fund-financed response: The RPM coordinates, directs, and reviews the work of other agencies, responsible parties, and contractors to assure compliance with the NCP, Record of Decision (ROD), consent decree, administrative order, and lead **agency**-approved plans applicable to the response. Based upon the reports of these parties, the RPM shall recommend action for decisions by lead **agency** officials. The RPM's period of responsibility begins prior to initiation of the RI/FS, described in Sec. 300.430, and continues through design and remedial action and the CERCLA cost recovery activity. The OSC and RPM shall ensure orderly transition of responsibilities from one to the other.

(3) The RPM shall participate in all decision-making processes necessary to ensure compliance with the NCP, including, as appropriate, agreements between EPA or other federal agencies and the state. The RPM may also review responses where EPA has preauthorized a person to file a claim for reimbursement to determine that the response was consistent with the terms of such preauthorization in cases where claims are filed for reimbursement.

(g)(1) Where a support **agency** has been identified through a cooperative agreement, Superfund Memorandum of Agreement (SMOA), or other agreement, that **agency** may designate a support **agency** coordinator (SAC) to provide assistance, as requested, by the OSC/RPM. The SAC is the prime representative of the support **agency** for response actions.

(2) The SAC's responsibilities may include:

(i) Providing and reviewing data and documents as requested by the OSC/RPM during the planning, design, and cleanup activities of the response action; and

(ii) Providing other assistance as requested.

(h)(1) The lead **agency** should provide appropriate training for its OSCs, RPMs, and other response personnel to carry out their responsibilities under the NCP.

(2) OSCs/RPMs should ensure that persons designated to act as their on-scene representatives are adequately trained and prepared to carry out actions under the NCP, to the extent practicable.

Sec. 300.125 Notification and communications.

(a) The National Response Center (NRC), located at USCG Headquarters, is the national communications center, continuously manned for handling activities related to response actions. The NRC acts as the single point of contact for all pollution incident reporting, and as the NRT communications center. Notice of discharges and releases must be made telephonically through a toll free number or a special local number (Telecommunication Device for the Deaf (TDD) and collect calls accepted). (Notification details appear in Secs. 300.300 and 300.405.) The NRC receives and immediately relays telephone notices of discharges or releases to the appropriate predesignated federal OSC. The telephone report is distributed to any interested NRT member **agency** or federal entity that has established a written agreement or understanding with the NRC. The NRC evaluates incoming information and immediately advises FEMA of a potential major disaster situation.

(b) The Commandant, USCG, in conjunction with other NRT agencies, shall provide the necessary personnel, communications, plotting facilities, and equipment for the NRC.

(c) Notice of an oil discharge or release of a hazardous substance in an amount equal to or greater than the reportable quantity must be made immediately in accordance with 33 **CFR part** 153, subpart B, and 40 **CFR part** 302, respectively. Notification shall be made to the NRC Duty Officer, HQ USCG, Washington, DC, telephone (800) 424-8802 or (202) 267-2675. All notices of discharges or releases received at the NRC will be relayed immediately by telephone to the OSC.

Sec. 300.130 Determinations to initiate response and special conditions.

(a) In accordance with CWA and CERCLA, the Administrator of EPA or the Secretary of the department in which the USCG is operating, as appropriate, is authorized to act for the United States to take response measures deemed necessary to protect the public health or welfare or environment from discharges of oil or releases of hazardous substances, pollutants, or contaminants except with respect to such releases on or from vessels or facilities under the jurisdiction, custody, or control of other federal agencies.

(b) The Administrator of EPA or the Secretary of the department in which the USCG is operating, as appropriate, is authorized to initiate and, in the case of a discharge posing a substantial threat to public health or welfare of the United States is required to initiate and direct, appropriate response activities when the Administrator or Secretary determines that any oil or CWA hazardous substance is discharged or there is a substantial threat of such discharge from any vessel or offshore or onshore facility into or on the navigable waters of the United States, on the adjoining shorelines to the navigable waters, into or on the waters of the exclusive economic zone, or that may affect natural resources belonging to, appertaining to, or under exclusive management authority of the United States; or

(c) The Administrator of EPA or the Secretary of the department in which the USCG is operating, as appropriate, is authorized to initiate appropriate response activities when the Administrator or Secretary determines that any hazardous substance is released or there is a threat of such a release into the environment, or there is a release or threat of release into the environment of any pollutant or contaminant which may present an imminent and substantial danger to the public health or welfare of the United States.

(d) In addition to any actions taken by a state or local government, the Administrator of EPA or the Secretary of the department in which the USCG is operating may request the U.S. Attorney General to secure the relief from any person, including the owner or operator of the vessel or facility necessary to abate a threat or, after notice to the affected state, take any other action authorized by section 311 of the CWA or section 106 of CERCLA as appropriate, including issuing administrative orders, that may be necessary to protect the public health or welfare, if the Administrator or Secretary determines:

(1) That there may be an imminent and substantial threat to the public health or welfare of the United States or the environment of the United States, including fish, shellfish, and wildlife, public and private property, shorelines, beaches, habitats, and other living and nonliving natural resources under the jurisdiction or control of the United States, because of an actual or threatened discharge of oil or a CWA hazardous substance from any vessel or offshore or onshore facility into or upon the navigable waters of the United States; or

(2) That there may be an imminent and substantial endangerment to the public health or welfare of the United States or the environment

because of a release of a CERCLA hazardous substance from a facility.

(e) Response actions to remove discharges originating from operations conducted subject to the Outer Continental Shelf Lands Act shall be in accordance with the NCP.

(f) Where appropriate, when a discharge or release involves radioactive materials, the lead or support federal **agency** shall act consistent with the notification and assistance procedures described in the appropriate Federal Radiological Plan. For the purpose of the NCP, the FRERP (24 **CFR part** 2401) is the appropriate plan. Most radiological discharges and releases do not result in FRERP activation and should be handled in accordance with the NCP. However, releases from nuclear incidents subject to requirements for financial **protection** established by the Nuclear Regulatory Commission under the Price-Anderson amendments (section 170) of the Atomic Energy Act are specifically excluded from CERCLA and NCP requirements.

(g) Removal actions involving nuclear weapons should be conducted in accordance with the joint Department of Defense, Department of Energy, and FEMA Agreement for Response to Nuclear Incidents and Nuclear Weapons Significant Incidents (January 8, 1981).

(h) If the situation is beyond the capability of state and local governments and the statutory authority of federal agencies, the President may, under the Disaster Relief Act of 1974, act upon a request by the governor and declare a major disaster or emergency and appoint a Federal Coordinating Officer (FCO) to coordinate all federal disaster assistance activities. In such cases, the OSC/RPM would continue to carry out OSC/RPM responsibilities under the NCP, but would coordinate those activities with the FCO to ensure consistency with other federal disaster assistance activities.

(i) In the event of a declaration of a major disaster by the President, the FEMA may activate the Federal Response Plan (FRP). A FCO, designated by the President, may implement the FRP and coordinate and direct emergency assistance and disaster relief of impacted individuals, business, and public services under the Robert T. Stafford Disaster Relief Act. Delivery of federal assistance is facilitated through twelve functional annexes to the FRP known as Emergency Support Functions (ESFs). EPA coordinates activities under ESF #10--Hazardous Materials, which addresses preparedness and response to hazardous materials and oil incidents caused by a natural disaster or other catastrophic event. In such cases, the OSC/RPM should coordinate response activities with the FCO, through the incident-specific ESF #10 Chair, to ensure consistency with federal disaster assistance activities.

Sec. 300.135 Response operations.

(a) The OSC/RPM, consistent with Secs. 300.120 and 300.125, shall direct response efforts and coordinate all other efforts at the scene of a discharge or release. As **part** of the planning and preparation for response, the OSCs/RPMs shall be predesignated by the regional or district head of the lead **agency**.

(b) The first federal official affiliated with an NRT member **agency** to arrive at the scene of a discharge or release should coordinate activities under the NCP and is authorized to initiate, in consultation with the OSC, any necessary actions normally carried out by the OSC until the arrival of the predesignated OSC. This official may initiate federal fund-financed actions only as authorized by the OSC or, if the OSC is unavailable, the authorized representative of the lead **agency**.

(c) The OSC/RPM shall, to the extent practicable, collect pertinent facts about the discharge or release, such as its source and cause; the

identification of potentially responsible parties; the nature, amount, and location of discharged or released materials; the probable direction and time of travel of discharged or released materials; whether the discharge is a worst case discharge as discussed in Sec. 300.324; the pathways to human and **environmental** exposure; the potential impact on human health, welfare, and safety and the environment; whether the discharge or release poses a substantial threat to the public health or welfare of the United States as discussed in Sec. 300.322; the potential impact on natural resources and property which may be affected; priorities for protecting human health and welfare and the environment; and appropriate cost documentation.

(d) The OSC's/RPM's efforts shall be coordinated with other appropriate federal, state, local, and private response agencies. OSCs/RPMs may designate capable persons from federal, state, or local agencies to act as their on-scene representatives. State and local governments, however, are not authorized to take actions under subparts D and E of the NCP that involve expenditures of the Oil Spill Liability Trust Fund or CERCLA funds unless an appropriate contract or cooperative agreement has been established. The basic framework for the response management structure is a system (e.g., a unified command system), that brings together the functions of the federal government, the state government, and the responsible party to achieve an effective and efficient response, where the OSC maintains authority.

(e) The OSC/RPM should consult regularly with the RRT and NSFCC, as appropriate, in carrying out the NCP and keep the RRT and NSFCC, as appropriate, informed of activities under the NCP.

(f) The OSC/RPM shall advise the support **agency** as promptly as possible of reported releases.

(g) The OSC/RPM should evaluate incoming information and immediately advise FEMA of potential major disaster situations.

(h) In those instances where a possible public health emergency exists, the OSC/RPM should notify the Department of Health and Human Services (HHS) representative to the RRT. Throughout response actions, the OSC/RPM may call upon the HHS representative for assistance in determining public health threats and call upon the Occupational Safety and Health Administration (OSHA) and HHS for assistance on worker health and safety issues.

(i) All federal agencies should plan for emergencies and develop procedures for dealing with oil discharges and releases of hazardous substances, pollutants, or contaminants from vessels and facilities under their jurisdiction. All federal agencies, therefore, are responsible for designating the office that coordinates response to such incidents in accordance with the NCP and applicable federal regulations and guidelines.

(j)(1) The OSC/RPM shall ensure that the trustees for natural resources are promptly notified of discharges or releases.

(2) The OSC or RPM shall coordinate all response activities with the affected natural resource trustees and, for discharges of oil, the OSC shall consult with the affected trustees on the appropriate removal action to be taken.

(k) Where the OSC/RPM becomes aware that a discharge or release may affect any endangered or threatened species or their habitat, the OSC/RPM shall consult with the Department of Interior (DOI), or the Department of Commerce (DOC) (NOAA) and, if appropriate, the cognizant federal land managing **agency**.

(l) The OSC/RPM is responsible for addressing worker health and safety concerns at a response scene, in accordance with Sec. 300.150.

(m) The OSC shall submit pollution reports to the RRT and other appropriate agencies as significant developments occur during response

actions, through communications networks or procedures agreed to by the RRT and covered in the RCP.

(n) OSCs/RPMs should ensure that all appropriate public and private interests are kept informed and that their concerns are considered throughout a response, to the extent practicable, consistent with the requirements of Sec. 300.155 of this **part**.

Sec. 300.140 Multi-regional responses.

(a) If a discharge or release moves from the area covered by one ACP or RCP into another area, the authority for response actions should likewise shift. If a discharge or release affects areas covered by two or more ACPs or RCPs, the response mechanisms of each applicable plan may be activated. In this case, response actions of all regions concerned shall be fully coordinated as detailed in the RCPs and ACPs.

(b) There shall be only one OSC and/or RPM at any time during the course of a response operation. Should a discharge or release affect two or more areas, EPA, the USCG, DOD, DOE, or other lead **agency**, as appropriate, shall give prime consideration to the area vulnerable to the greatest threat, in determining which **agency** should provide the OSC and/or RPM. The RRT shall designate the OSC and/or RPM if the RRT member agencies who have response authority within the affected areas are unable to agree on the designation. The RRT shall designate the OSC and/or RPM if members of one RRT or two adjacent RRTs are unable to agree on the designation.

(c) Where the USCG has initially provided the OSC for response to a release from hazardous waste management facilities located in the coastal zone, responsibility for response action shall shift to EPA or another federal **agency**, as appropriate.

Sec. 300.145 Special teams and other assistance available to OSCs/RPMs.

(a) The NSF is a special team established by the USCG, including the three USCG Strike Teams, the Public Information Assist Team (PIAT), and the NSFCC. The NSF is available to assist OSCs/RPMs in their preparedness and response duties.

(1) The three Strike Teams (Atlantic, Gulf, and Pacific) provide trained personnel and specialized equipment to assist the OSC in training for spill response, stabilizing and containing the spill, and in monitoring or directing the response actions of the responsible parties and/or contractors. The OSC has a specific team designated for initial contact and may contact that team directly for any assistance.

(2) The NSFCC can provide the following support to the OSC:

(i) Technical assistance, equipment and other resources to augment the OSC staff during spill response.

(ii) Assistance in coordinating the use of private and public resources in support of the OSC during a response to or a threat of a worst case discharge of oil.

(iii) Review of the area contingency plan, including an evaluation of equipment readiness and coordination among responsible public agencies and private organizations.

(iv) Assistance in locating spill response resources for both response and planning, using the NSFCC's national and international computerized inventory of spill response resources.

(v) Coordination and evaluation of pollution response exercises.

(vi) Inspection of district prepositioned pollution response

equipment.

(3) PIAT is an element of the NSFCC staff which is available to assist OSCs to meet the demands for public information during a response or exercise. Its use is encouraged any time the OSC requires outside public affairs support. Requests for PIAT assistance may be made through the NSFCC or NRC.

(b) (1) The **Environmental** Response Team (ERT) is established by EPA in accordance with its disaster and emergency responsibilities. The ERT has expertise in treatment technology, biology, chemistry, hydrology, geology, and engineering.

(2) The ERT can provide access to special decontamination equipment for chemical releases and advice to the OSC/RPM in hazard evaluation; risk assessment; multimedia sampling and analysis program; on-site safety, including development and implementation plans; cleanup techniques and priorities; water supply decontamination and **protection**; application of dispersants; **environmental** assessment; degree of cleanup required; and disposal of contaminated material.

(3) The ERT also provides both introductory and intermediate level training courses to prepare response personnel.

(4) OSC/RPM or RRT requests for ERT support should be made to the EPA representative on the RRT; EPA Headquarters, Director, Emergency Response Division; or the appropriate EPA regional emergency coordinator.

(c) Scientific Support Coordinators (SSCs) may be designated by the OSC (and RPM in the case of EPA SSCs) as the principal advisors for scientific issues, communication with the scientific community, and coordination of requests for assistance from state and federal agencies regarding scientific studies. The SSC strives for a consensus on scientific issues affecting the response, but ensures that differing opinions within the community are communicated to the OSC/RPM.

(1) Generally, SSCs are provided by NOAA in the coastal zones, and by EPA in the inland zone. OSC/RPM requests for SSC support can be made directly to the SSC assigned to the area or to the **agency** member of the RRT. NOAA SSCs can also be requested through NOAA's SSC program office in Seattle, WA. NOAA SSCs are assigned to USCG Districts and are supported by a scientific support team that includes expertise in **environmental** chemistry, oil slick tracking, pollutant transport modeling, natural resources at risk, **environmental** tradeoffs of countermeasures and cleanup, and information management.

(2) During a response, the SSC serves on the federal OSC's/RPM's staff and may, at the request of the OSC/RPM, lead the scientific team and be responsible for providing scientific support for operational decisions and for coordinating on-scene scientific activity. Depending on the nature and location of the incident, the SSC integrates expertise from governmental agencies, universities, community representatives, and industry to assist the OSC/RPM in evaluating the hazards and potential effects of releases and in developing response strategies.

(3) At the request of the OSC, the SSC may facilitate the OSC's work with the lead administrative trustee for natural resources to ensure coordination between damage assessment data collection efforts and data collected in support of response operations.

(4) SSCs support the Regional Response Teams and the Area Committees in preparing regional and area contingency plans and in conducting spill training and exercises. For area plans, the SSC provides leadership for the synthesis and integration of **environmental** information required for spill response decisions in support of the OSC.

(d) (1) SUPSALV has an extensive salvage/search and recovery

equipment inventory with the requisite knowledge and expertise to support these operations, including specialized salvage, firefighting, and petroleum, oil and lubricants offloading capability.

(2) When possible, SUPSALV will provide equipment for training exercises in support of national and regional contingency planning objectives.

(3) The OSC/RPM may request assistance directly from SUPSALV. Formal requests are routed through the Chief of Naval Operations (N312).

(e) For marine salvage operations, OSCs/RPMs with responsibility for monitoring, evaluating, or supervising these activities should request technical assistance from DOD, the Strike Teams, or commercial salvors as necessary to ensure that proper actions are taken. Marine salvage operations generally fall into five categories: afloat salvage; offshore salvage; river and harbor clearance; cargo salvage; and rescue towing. Each category requires different knowledge and specialized types of equipment. The complexity of such operations may be further compounded by local **environmental** and geographic conditions. The nature of marine salvage and the conditions under which it occurs combine to make such operations imprecise, difficult, hazardous, and expensive. Thus, responsible parties or other persons attempting to perform such operations without adequate knowledge, equipment, and experience could aggravate, rather than relieve, the situation.

(f) Radiological Emergency Response Teams (RERTs) have been established by EPA's Office of Radiation Programs (ORP) to provide response and support for incidents or sites containing radiological hazards. Expertise is available in radiation monitoring, radionuclide analysis, radiation health physics, and risk assessment. RERTs can provide on-site support including mobile monitoring laboratories for field analyses of samples and fixed laboratories for radiochemical sampling and analyses. Requests for support may be made 24 hours a day via the NRC or directly to the EPA Radiological Response Coordinator in the Office of Radiation Programs. Assistance is also available from DOE and other federal agencies.

(g) (1) DRGs assist the OSC by providing technical assistance, personnel, and equipment, including pre-positioned equipment. Each DRG consists of all Coast Guard personnel and equipment, including marine firefighting equipment, in its district, additional pre-positioned equipment, and a District Response Advisory Team (DRAT) that is available to provide support to the OSC in the event that a spill exceeds local response capabilities. Each DRG:

(i) Shall provide technical assistance, equipment, and other resources, as available, when requested by an OSC through the USCG representative to the RRT;

(ii) Shall ensure maintenance of all USCG response equipment within its district;

(iii) May provide technical assistance in the preparation of the ACP; and

(iv) Shall review each of those plans that affect its area of geographic responsibility.

(2) In deciding where to locate personnel and pre-positioned equipment, the USCG shall give priority emphasis to:

(i) The availability of facilities for loading and unloading heavy or bulky equipment by barge;

(ii) The proximity to an airport capable of supporting large military transport aircraft;

(iii) The flight time to provide response to oil spills in all areas of the Coast Guard district with the potential for marine casualties;

(iv) The availability of trained local personnel capable of responding in an oil spill emergency; and

(v) Areas where large quantities of petroleum products are transported.

(h) The NPFC is responsible for implementing those portions of Title I of the OPA that have been delegated to the Secretary of the department in which the Coast Guard is operating. The NPFC is responsible for addressing funding issues arising from discharges and threats of discharges of oil. The NPFC:

(1) Issues Certificates of Financial Responsibility to owners and operators of vessels to pay for costs and damages that are incurred by their vessels as a result of oil discharges;

(2) Provides funding for various response organizations for timely abatement and removal actions related to oil discharges;

(3) Provides equitable compensation to claimants who sustain costs and damages from oil discharges when the responsible party fails to do so;

(4) Recovers monies from persons liable for costs and damages resulting from oil discharges to the full extent of liability under the law; and

(5) Provides funds to initiate natural resource damage assessments.

Sec. 300.150 Worker health and safety.

(a) Response actions under the NCP will comply with the provisions for response action worker safety and health in 29 **CFR** 1910.120. The NRS meets the requirements of 29 **CFR** 1910.120 concerning use of an incident command system.

(b) In a response action taken by a responsible party, the responsible party must assure that an occupational safety and health program consistent with 29 **CFR** 1910.120 is made available for the **protection** of workers at the response site.

(c) In a response taken under the NCP by a lead **agency**, an occupational safety and health program should be made available for the **protection** of workers at the response site, consistent with, and to the extent required by, 29 **CFR** 1910.120. Contracts relating to a response action under the NCP should contain assurances that the contractor at the response site will comply with this program and with any applicable provisions of the Occupational Safety and Health Act of 1970 (29 U.S.C. 651 et seq.) (OSH Act) and state laws with plans approved under section 18 of the OSH Act.

(d) When a state, or political subdivision of a state, without an OSHA-approved state plan is the lead **agency** for response, the state or political subdivision must comply with standards in **40 CFR part** 311, promulgated by EPA pursuant to section 126(f) of SARA.

(e) Requirements, standards, and regulations of the OSH Act and of state OSH laws not directly referenced in paragraphs (a) through (d) of this section, must be complied with where applicable. Federal OSH Act requirements include, among other things, Construction Standards (29 **CFR part** 1926), General Industry Standards (29 **CFR part** 1910), and the general duty requirement of section 5(a)(1) of the OSH Act (29 U.S.C. 654(a)(1)). No action by the lead **agency** with respect to response activities under the NCP constitutes an exercise of statutory authority within the meaning of section 4(b)(1) of the OSH Act. All governmental agencies and private employers are directly responsible for the health and safety of their own employees.

Sec. 300.155 Public information and community relations.

(a) When an incident occurs, it is imperative to give the public prompt, accurate information on the nature of the incident and the actions underway to mitigate the damage. OSCs/RPMs and community relations personnel should ensure that all appropriate public and private interests are kept informed and that their concerns are considered throughout a response. They should coordinate with available public affairs/community relations resources to carry out this responsibility by establishing, as appropriate, a Joint Information Center bringing together resources from federal and state agencies and the responsible party.

(b) An on-scene news office may be established to coordinate media relations and to issue official federal information on an incident. Whenever possible, it will be headed by a representative of the lead **agency**. The OSC/RPM determines the location of the on-scene news office, but every effort should be made to locate it near the scene of the incident. If a participating **agency** believes public interest warrants the issuance of statements and an on-scene news office has not been established, the affected **agency** should recommend its establishment. All federal news releases or statements by participating agencies should be cleared through the OSC/RPM. Information dissemination relating to natural resource damage assessment activities shall be coordinated through the lead administrative trustee. The designated lead administrative trustee may assist the OSC/RPM by disseminating information on issues relating to damage assessment activities. Following termination of removal activity, information dissemination on damage assessment activities shall be through the lead administrative trustee.

(c) The community relations requirements specified in Secs. 300.415, 300.430, and 300.435 apply to removal, remedial, and enforcement actions and are intended to promote active communication between communities affected by discharges or releases and the lead **agency** responsible for response actions. Community Relations Plans (CRPs) are required by EPA for certain response actions. The OSC/RPM should ensure coordination with such plans which may be in effect at the scene of a discharge or release or which may need to be developed during follow-up activities.

Sec. 300.160 Documentation and cost recovery.

(a) For releases of a hazardous substance, pollutant, or contaminant, the following provisions apply:

(1) During all phases of response, the lead **agency** shall complete and maintain documentation to support all actions taken under the NCP and to form the basis for cost recovery. In general, documentation shall be sufficient to provide the source and circumstances of the release, the identity of responsible parties, the response action taken, accurate accounting of federal, state, or private party costs incurred for response actions, and impacts and potential impacts to the public health and welfare and the environment. Where applicable, documentation shall state when the NRC received notification of a release of a reportable quantity.

(2) The information and reports obtained by the lead **agency** for Fund-financed response actions shall, as appropriate, be transmitted to the chair of the RRT. Copies can then be forwarded to the NRT, members of the RRT, and others as appropriate.

(3) The lead **agency** shall make available to the trustees of affected natural resources information and documentation that can assist the trustees in the determination of actual or potential natural resource injuries.

(b) For discharges of oil, documentation and cost recovery provisions are described in Sec. 300.315.

(c) Response actions undertaken by the participating agencies shall be carried out under existing programs and authorities when available. Federal agencies are to make resources available, expend funds, or participate in response to discharges and releases under their existing authority. Interagency agreements may be signed when necessary to ensure that the federal resources will be available for a timely response to a discharge or release. The ultimate decision as to the appropriateness of expending funds rests with the **agency** that is held accountable for such expenditures. Further funding provisions for discharges of oil are described in Sec. 300.335.

(d) The Administrator of EPA and the Administrator of the **Agency** for Toxic Substances and Disease Registry (ATSDR) shall assure that the costs of health assessment or health effect studies conducted under the authority of CERCLA section 104(i) are documented in accordance with standard EPA procedures for cost recovery. Documentation shall include information on the nature of the hazardous substances addressed by the research, information concerning the locations where these substances have been found, and any available information on response actions taken concerning these substances at the location.

Sec. 300.165 OSC reports.

(a) As requested by the NRT or RRT, the OSC/RPM shall submit to the NRT or RRT a complete report on the removal operation and the actions taken. The RRT shall review the OSC report and send to the NRT a copy of the OSC report with its comments or recommendations within 30 days after the RRT has received the OSC report.

(b) The OSC report shall record the situation as it developed, the actions taken, the resources committed, and the problems encountered.

Sec. 300.170 Federal **agency** participation.

Federal agencies listed in Sec. 300.175 have duties established by statute, executive order, or Presidential directive which may apply to federal response actions following, or in prevention of, the discharge of oil or release of a hazardous substance, pollutant, or contaminant. Some of these agencies also have duties relating to the restoration, rehabilitation, replacement, or acquisition of equivalent natural resources injured or lost as a result of such discharge or release as described in subpart G of this **part**. The NRT, RRT, and Area Committee organizational structure, and the NCP, RCPs and ACPs, described in Sec. 300.210, provide for agencies to coordinate with each other in carrying out these duties.

(a) Federal agencies may be called upon by an OSC/RPM during response planning and implementation to provide assistance in their respective areas of expertise, as described in Sec. 300.175, consistent with the agencies' capabilities and authorities.

(b) In addition to their general responsibilities, federal agencies should:

(1) Make necessary information available to the Secretary of the NRT, RRTs, Area Committees, and OSCs/RPMs.

(2) Provide representatives to the NRT and RRTs and otherwise

assist RRTs and OSCs, as necessary, in formulating RCPs and ACPs.

(3) Inform the NRT, RRTs, and Area Committees, consistent with national security considerations, of changes in the availability of resources that would affect the operations implemented under the NCP.

(c) All federal agencies are responsible for reporting releases of hazardous substances from facilities or vessels under their jurisdiction or control in accordance with section 103 of CERCLA.

(d) All federal agencies are encouraged to report releases of pollutants or contaminants and must report discharges of oil, as required in **40 CFR part 110**, from facilities or vessels under their jurisdiction or control to the NRC.

Sec. **300.175** Federal agencies: additional responsibilities and assistance.

(a) During preparedness planning or in an actual response, various federal agencies may be called upon to provide assistance in their respective areas of expertise, as indicated in paragraph (b) of this section, consistent with **agency** legal authorities and capabilities.

(b) The federal agencies include:

(1) USCG, as provided in 14 U.S.C. 1-3, is an **agency** in DOT, except when operating as an **agency** in the United States Navy (USN) in time of war. The USCG provides the NRT vice chair, co-chairs for the standing RRTs, and predesignated OSCs for the coastal zone, as described in Sec. **300.120(a)(1)**. The USCG maintains continuously manned facilities which can be used for command, control, and surveillance of oil discharges and hazardous substance releases occurring in the coastal zone. The USCG also offers expertise in domestic and international fields of port safety and security, maritime law enforcement, ship navigation and construction, and the manning, operation, and safety of vessels and marine facilities. The USCG may enter into a contract or cooperative agreement with the appropriate state in order to implement a response action.

(2) EPA chairs the NRT and co-chairs, with the USCG, the standing RRTs; provides predesignated OSCs for all inland areas for which an ACP is required under CWA section 311(j) and for discharges and releases occurring in the inland zone and RPMs for remedial actions except as otherwise provided; and generally provides the SSC for responses in the inland zone. EPA provides expertise on human health and ecological effects of oil discharges or releases of hazardous substances, pollutants, or contaminants; ecological and human health risk assessment methods; and **environmental** pollution control techniques. Access to EPA's scientific expertise can be facilitated through the EPA representative to the Research and Development Committee of the National Response Team; the EPA Office of Research and Development's Superfund Technical Liaisons or Regional Scientists located in EPA Regional offices; or through EPA's Office of Science Planning and Regulatory Evaluation. EPA also provides legal expertise on the interpretation of CERCLA and other **environmental** statutes. EPA may enter into a contract or cooperative agreement with the appropriate state in order to implement a response action.

(3) FEMA provides guidance, policy and program advice, and technical assistance in hazardous materials, chemical, and radiological emergency preparedness activities (including planning, training, and exercising). FEMA's primary point of contact for administering financial and technical assistance to state and local governments to support their efforts to develop and maintain an effective emergency management and response capability is the Preparedness, Training, and Exercises

Directorate.

(4) DOD has responsibility to take all action necessary with respect to releases where either the release is on, or the sole source of the release is from, any facility or vessel under the jurisdiction, custody, or control of DOD. In addition to those capabilities provided by SUPSALV, DOD may also, consistent with its operational requirements and upon request of the OSC, provide locally deployed USN oil spill equipment and provide assistance to other federal agencies on request. The following two branches of DOD have particularly relevant expertise:

(i) The United States Army Corps of Engineers has specialized equipment and personnel for maintaining navigation channels, for removing navigation obstructions, for accomplishing structural repairs, and for performing maintenance to hydropower electric generating equipment. The Corps can also provide design services, perform construction, and provide contract writing and contract administrative services for other federal agencies.

(ii) The U.S. Navy Supervisor of Salvage (SUPSALV) is the branch of service within DOD most knowledgeable and experienced in ship salvage, shipboard damage control, and diving. The USN has an extensive array of specialized equipment and personnel available for use in these areas as well as specialized containment, collection, and removal equipment specifically designed for salvage-related and open-sea pollution incidents.

(5) DOE generally provides designated OSCs/RPMs that are responsible for taking all response actions with respect to releases where either the release is on, or the sole source of the release is from, any facility or vessel under its jurisdiction, custody, or control, including vessels bareboat-chartered and operated. In addition, under the FRERP, DOE provides advice and assistance to other OSCs/RPMs for emergency actions essential for the control of immediate radiological hazards. Incidents that qualify for DOE radiological advice and assistance are those believed to involve source, by-product, or special nuclear material or other ionizing radiation sources, including radium, and other naturally occurring radionuclides, as well as particle accelerators. Assistance is available through direct contact with the appropriate DOE Radiological Assistance Program Regional Office.

(6) The Department of Agriculture (USDA) has scientific and technical capability to measure, evaluate, and monitor, either on the ground or by use of aircraft, situations where natural resources including soil, water, wildlife, and vegetation have been impacted by fire, insects and diseases, floods, hazardous substances, and other natural or man-caused emergencies. The USDA may be contacted through Forest Service emergency staff officers who are the designated members of the RRT. Agencies within USDA have relevant capabilities and expertise as follows:

(i) The Forest Service has responsibility for **protection** and management of national forests and national grasslands. The Forest Service has personnel, laboratory, and field capability to measure, evaluate, monitor, and control as needed, releases of pesticides and other hazardous substances on lands under its jurisdiction.

(ii) The Agriculture Research Service (ARS) administers an applied and developmental research program in animal and plant **protection** and production; the use and improvement of soil, water, and air; the processing, storage, and distribution of farm products; and human nutrition. The ARS has the capabilities to provide regulation of, and evaluation and training for, employees exposed to biological, chemical, radiological, and industrial hazards. In emergency situations, the ARS can identify, control, and abate pollution in the areas of air, soil,

wastes, pesticides, radiation, and toxic substances for ARS facilities.

(iii) The Soil Conservation Service (SCS) has personnel in nearly every county in the nation who are knowledgeable in soil, agronomy, engineering, and biology. These personnel can help to predict the effects of pollutants on soil and their movements over and through soils. Technical specialists can assist in identifying potential hazardous waste sites and provide review and advice on plans for remedial measures.

(iv) The Animal and Plant Health Inspection Service (APHIS) can respond in an emergency to regulate movement of diseased or infected organisms to prevent the spread and contamination of nonaffected areas.

(v) The Food Safety and Inspection Service (FSIS) has responsibility to prevent meat and poultry products contaminated with harmful substances from entering human food channels. In emergencies, the FSIS works with other federal and state agencies to establish acceptability for slaughter of exposed or potentially exposed animals and their products. In addition they are charged with managing the Federal Radiological Emergency Response Program for the USDA.

(7) DOC, through NOAA, provides scientific support for response and contingency planning in coastal and marine areas, including assessments of the hazards that may be involved, predictions of movement and dispersion of oil and hazardous substances through trajectory modeling, and information on the sensitivity of coastal environments to oil and hazardous substances and associated clean-up and mitigation methods; provides expertise on living marine resources and their habitats, including endangered species, marine mammals and National Marine Sanctuary ecosystems; provides information on actual and predicted meteorological, hydrological, ice, and oceanographic conditions for marine, coastal, and inland waters, and tide and circulation data for coastal and territorial waters and for the Great Lakes.

(8) HHS assists with the assessment, preservation, and **protection** of human health and helps ensure the availability of essential human services. HHS provides technical and nontechnical assistance in the form of advice, guidance, and resources to other federal agencies as well as state and local governments.

(i) The principal HHS response comes from the U.S. Public Health Service and is coordinated from the Office of the Assistant Secretary for Health, and various Public Health Service regional offices. Within the Public Health Service, the primary response to a hazardous materials emergency comes from **Agency** for Toxic Substances and Disease Registry (ATSDR) and the Centers for Disease Control (CDC). Both ATSDR and CDC have a 24-hour emergency response capability wherein scientific and technical personnel are available to provide technical assistance to the lead federal **agency** and state and local response agencies on human health threat assessment and analysis, and exposure prevention and mitigation. Such assistance is used for situations requiring evacuation of affected areas, human exposure to hazardous materials, and technical advice on mitigation and prevention. CDC takes the lead during petroleum releases regulated under the CWA and OPA while ATSDR takes the lead during chemical releases under CERCLA. Both agencies are mutually supportive.

(ii) Other Public Health Service agencies involved in support during hazardous materials incidents either directly or through ATSDR/CDC include the Food and Drug Administration, the Health Resources and Services Administration, the Indian Health Service, and the National Institutes of Health.

(iii) Statutory authority for HHS/National Institutes for **Environmental** Health Sciences (NIEHS) involvement in hazardous materials accident prevention is non-regulatory in nature and focused

on two primary areas for preventing community and worker exposure to hazardous materials releases: Worker safety training and basic research activities. Under section 126 of SARA, NIEHS is given statutory authority for supporting development of curricula and model training programs for waste workers and chemical emergency responders.

Under section 118(b) of the Hazardous Materials Transportation and Uniform Safety Act (HMTUSA) (49 U.S.C. 1802 et seq.), NIEHS also administers the Hazmat Employee Training Program to prepare curricula and training for hazardous materials transportation workers. In the basic research arena, NIEHS is authorized under section 311 of SARA to conduct a hazardous substance basic research and training program to evaluate toxic effects and assess human health risks from accidental releases of hazardous materials. Under Title IX, section 901(h) of the Clean Air Act Amendments, NIEHS also is authorized to conduct basic research on air pollutants, as well as train physicians in **environmental** health. Federal research and training in hazardous materials release prevention represents an important non-regulatory activity and supplements ongoing private sector programs.

(9) DOI may be contacted through Regional **Environmental** Officers (REOs), who are the designated members of RRTs. Department land managers have jurisdiction over the national park system, national wildlife refuges and fish hatcheries, the public lands, and certain water projects in western states. In addition, bureaus and offices have relevant expertise as follows:

(i) United States Fish and Wildlife Service (USFWS) and other Bureaus: Anadromous and certain other fishes and wildlife, including endangered and threatened species, migratory birds, and certain marine mammals; waters and wetlands; and effects on natural resources.

(ii) The National Biological Survey performs research in support of biological resource management; inventories, monitors, and reports on the status and trends in the Nation's biotic resources; and transfers the information gained in research and monitoring to resource managers and others concerned with the care, use, and conservation of the Nation's natural resources. The National Biological Survey has laboratory/research facilities.

(iii) Geological Survey: Geology, hydrology (ground water and surface water), and natural hazards.

(iv) Bureau of Land Management: Minerals, soils, vegetation, wildlife, habitat, archaeology, and wilderness; and hazardous materials.

(v) Minerals Management Service: Oversight of offshore oil and gas exploration and production facilities and associated pipelines and pipeline facilities under the Outer Continental Shelf Lands Act and the CWA; oil spill response technology research; and establishing oil discharge contingency planning requirements for offshore facilities.

(vi) Bureau of Mines: Analysis and identification of inorganic hazardous substances and technical expertise in metals and metallurgy relevant to site cleanup.

(vii) Office of Surface Mining: Coal mine wastes and land reclamation.

(viii) National Park Service: General biological, natural, and cultural resource managers to evaluate, measure, monitor, and contain threats to park system lands and resources; archaeological and historical expertise in **protection**, preservation, evaluation, impact mitigation, and restoration of cultural resources; emergency personnel.

(ix) Bureau of Reclamation: Operation and maintenance of water projects in the West; engineering and hydrology; and reservoirs.

(x) Bureau of Indian Affairs: Coordination of activities affecting Indian lands; assistance in identifying Indian tribal government

officials.

(xi) Office of Territorial Affairs: Assistance in implementing the NCP in American Samoa, Guam, the Pacific Island Governments, the Northern Mariana Islands, and the Virgin Islands.

(10) The Department of Justice (DOJ) can provide expert advice on complicated legal questions arising from discharges or releases, and federal **agency** responses. In addition, the DOJ represents the federal government, including its agencies, in litigation relating to such discharges or releases. Other legal issues or questions shall be directed to the federal **agency** counsel for the **agency** providing the OSC/RPM for the response.

(11) The Department of Labor (DOL), through OSHA and the states operating plans approved under section 18 of the OSH Act, has authority to conduct safety and health inspections of hazardous waste sites to assure that employees are being protected and to determine if the site is in compliance with:

(i) Safety and health standards and regulations promulgated by OSHA (or the states) in accordance with section 126 of SARA and all other applicable standards; and

(ii) Regulations promulgated under the OSH Act and its general duty clause. OSHA inspections may be self-generated, consistent with its program operations and objectives, or may be conducted in response to requests from EPA or another lead **agency**, or in response to accidents or employee complaints. OSHA may also conduct inspections at hazardous waste sites in those states with approved plans that choose not to exercise their jurisdiction to inspect such sites. On request, OSHA will provide advice and consultation to EPA and other NRT/RRT agencies as well as to the OSC/RPM regarding hazards to persons engaged in response activities. OSHA may also take any other action necessary to assure that employees are properly protected at such response activities. Any questions about occupational safety and health at these sites may be referred to the OSHA Regional Office.

(12) DOT provides response expertise pertaining to transportation of oil or hazardous substances by all modes of transportation. Through the Research and Special Programs Administration (RSPA), DOT offers expertise in the requirements for packaging, handling, and transporting regulated hazardous materials. DOT, through RSPA, establishes oil discharge contingency planning requirements for pipelines, transport by rail and containers or bulk transport of oil.

(13) The Department of State (DOS) will lead in the development of international joint contingency plans. It will also help to coordinate an international response when discharges or releases cross international boundaries or involve foreign flag vessels. Additionally, DOS will coordinate requests for assistance from foreign governments and U.S. proposals for conducting research at incidents that occur in waters of other countries.

(14) The Nuclear Regulatory Commission will respond, as appropriate, to releases of radioactive materials by its licensees, in accordance with the NRC Incident Response Plan (NUREG-0728) to monitor the actions of those licensees and assure that the public health and environment are protected and adequate recovery operations are instituted. The Nuclear Regulatory Commission will keep EPA informed of any significant actual or potential releases in accordance with procedural agreements. In addition, the Nuclear Regulatory Commission will provide advice to the OSC/RPM when assistance is required in identifying the source and character of other hazardous substance releases where the Nuclear Regulatory Commission has licensing authority for activities utilizing radioactive materials.

(15) The General Services Administration (GSA) provides logistic

and telecommunications support to federal agencies. During an emergency situation, GSA quickly responds to aid state and local governments as directed by other federal agencies. The type of support provided might include leasing and furnishing office space, setting up telecommunications and transportation services, and advisory assistance.

Sec. 300.180 State and local participation in response.

(a) Each state governor is requested to designate one state office/representative to represent the state on the appropriate RRT. The state's office/representative may participate fully in all activities of the appropriate RRT. Each state governor is also requested to designate a lead state **agency** that will direct state-lead response operations. This **agency** is responsible for designating the lead state response official for federal and/or state-lead response actions, and coordinating/communicating with any other state agencies, as appropriate. Local governments are invited to participate in activities on the appropriate RRT as may be provided by state law or arranged by the state's representative. Indian tribes wishing to participate should assign one person or office to represent the tribal government on the appropriate RRT.

(b) Appropriate local and state officials (including Indian tribes) will participate as **part** of the response structure as provided in the ACP.

(c) In addition to meeting the requirements for local emergency plans under SARA section 303, state and local government agencies are encouraged to include contingency planning for responses, consistent with the NCP, RCP, and ACP in all emergency and disaster planning.

(d) For facilities not addressed under CERCLA or the CWA, states are encouraged to undertake response actions themselves or to use their authorities to compel potentially responsible parties to undertake response actions.

(e) States are encouraged to enter into cooperative agreements pursuant to sections 104 (c) (3) and (d) of CERCLA to enable them to undertake actions authorized under subpart E of the NCP. Requirements for entering into these agreements are included in subpart F of the NCP. A state **agency** that acts pursuant to such agreements is referred to as the lead **agency**. In the event there is no cooperative agreement, the lead **agency** can be designated in a SMOA or other agreement.

(f) Because state and local public safety organizations would normally be the first government representatives at the scene of a discharge or release, they are expected to initiate public safety measures that are necessary to protect public health and welfare and that are consistent with containment and cleanup requirements in the NCP, and are responsible for directing evacuations pursuant to existing state or local procedures.

Sec. 300.185 Nongovernmental participation.

(a) Industry groups, academic organizations, and others are encouraged to commit resources for response operations. Specific commitments should be listed in the RCP and ACP. Those entities required to develop tank vessel and facility response plans under CWA section 311(j) must be able to respond to a worst case discharge to the maximum extent practicable, and shall commit sufficient resources to implement other aspects of those plans in accordance with the

requirements of 30 **CFR part** 254, 33 **CFR parts** 150, 154, and 155; 40 **CFR part** 112; and 49 **CFR parts** 171 and 194.

(b) The technical and scientific information generated by the local community, along with information from federal, state, and local governments, should be used to assist the OSC/RPM in devising response strategies where effective standard techniques are unavailable. Such information and strategies will be incorporated into the ACP, as appropriate. The SSC may act as liaison between the OSC/RPM and such interested organizations.

(c) ACPs shall establish procedures to allow for well organized, worthwhile, and safe use of volunteers, including compliance with Sec. 300.150 regarding worker health and safety. ACPs should provide for the direction of volunteers by the OSC/RPM or by other federal, state, or local officials knowledgeable in contingency operations and capable of providing leadership. ACPs also should identify specific areas in which volunteers can be used, such as beach surveillance, logistical support, and bird and wildlife treatment. Unless specifically requested by the OSC/RPM, volunteers generally should not be used for physical removal or remedial activities. If, in the judgment of the OSC/RPM, dangerous conditions exist, volunteers shall be restricted from on-scene operations.

(d) Nongovernmental participation must be in compliance with the requirements of subpart H of this **part** if any recovery of costs will be sought.

Subpart C--Planning and Preparedness

Sec. 300.200 General.

This subpart summarizes emergency preparedness activities relating to discharges of oil and releases of hazardous substances, pollutants, or contaminants; describes the three levels of contingency planning under the national response system; and cross-references state and local emergency preparedness activities under SARA Title III, also known as the ``Emergency Planning and Community Right-to-Know Act of 1986'' but referred to herein as ``Title III.'' Regulations implementing Title III are codified at 40 **CFR** Subchapter J.

Sec. 300.205 Planning and coordination structure.

(a) National. As described in Sec. 300.110, the NRT is responsible for national planning and coordination.

(b) Regional. As described in Sec. 300.115, the RRTs are responsible for regional planning and coordination.

(c) Area. As required by section 311(j) of the CWA, under the direction of the federal OSC for its area, Area Committees comprising qualified personnel of federal, state, and local agencies shall be responsible for:

(1) Preparing an ACP for their areas (as described in Sec. 300.210(c));

(2) Working with appropriate federal, state, and local officials to enhance the contingency planning of those officials and to assure pre-planning of joint response efforts, including appropriate procedures for mechanical recovery, dispersal, shoreline cleanup, **protection** of sensitive **environmental** areas, and **protection**, rescue, and rehabilitation of fisheries and wildlife; and

(3) Working with appropriate federal, state, and local officials to expedite decisions for the use of dispersants and other mitigating substances and devices.

(d) State. As provided by sections 301 and 303 of Title III, the SERC of each state, appointed by the Governor, is to designate emergency planning districts, appoint Local Emergency Planning Committees (LEPCs), supervise and coordinate their activities, and review local emergency response plans, which are described in Sec. 300.215. The SERC also is to establish procedures for receiving and processing requests from the public for information generated by Title III reporting requirements and to designate an official to serve as coordinator for information.

(e) Local. As provided by sections 301 and 303 of Title III, emergency planning districts are designated by the SERC in order to facilitate the preparation and implementation of emergency plans. Each LEPC is to prepare a local emergency response plan for the emergency planning district and establish procedures for receiving and processing requests from the public for information generated by Title III reporting requirements. The LEPC is to appoint a chair and establish rules for the LEPC. The LEPC is to designate an official to serve as coordinator for information and designate in its plan a community emergency coordinator.

(f) As required by section 311(j)(5) of the CWA, a tank vessel, as defined under section 2101 of title 46, U.S. Code, an offshore facility, and an onshore facility that, because of its location, could reasonably be expected to cause substantial harm to the environment by discharging into or on the navigable waters, adjoining shorelines, or exclusive economic zone must prepare and submit a plan for responding, to the maximum extent practicable, to a worst case discharge, and to a substantial threat of such a discharge, of oil or a hazardous substance.

(g) The relationship of these plans is described in Figure 4.

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Sec. 300.210 Federal contingency plans.

There are three levels of contingency plans under the national response system: The National Contingency Plan, RCPs, and ACPs. These plans are available for inspection at EPA regional offices or USCG district offices. Addresses and telephone numbers for these offices may be found in the United States Government Manual, issued annually, or in local telephone directories.

(a) The National Contingency Plan. The purpose and objectives, authority, and scope of the NCP are described in Secs. 300.1 through 300.3.

(b) Regional Contingency Plans. The RRTs, working with the states, shall develop federal RCPs for each standard federal region, Alaska, Oceania in the Pacific, and the Caribbean to coordinate timely, effective response by various federal agencies and other organizations to discharges of oil or releases of hazardous substances, pollutants, or contaminants. RCPs shall, as appropriate, include information on all useful facilities and resources in the region, from government,

commercial, academic, and other sources. To the greatest extent possible, RCPs shall follow the format of the NCP and be coordinated with state emergency response plans, ACPs, which are described in Sec. 300.210(c), and Title III local emergency response plans, which are described in Sec. 300.215. Such coordination should be accomplished by working with the SERCs in the region covered by the RCP. RCPs shall contain lines of demarcation between the inland and coastal zones, as mutually agreed upon by USCG and EPA.

(c) Area Contingency Plans. (1) Under the direction of an OSC and subject to approval by the lead **agency**, each Area Committee, in consultation with the appropriate RRTs, Coast Guard DRGs, the NSFCC, SSCs, LEPCs, and SERCs, shall develop an ACP for its designated area. This plan, when implemented in conjunction with other provisions of the NCP, shall be adequate to remove a worst case discharge under Sec. 300.324, and to mitigate or prevent a substantial threat of such a discharge, from a vessel, offshore facility, or onshore facility operating in or near the area.

(2) The areas of responsibility may include several Title III local planning districts, or parts of such districts. In developing the ACP, the OSC shall coordinate with affected SERCs and LEPCs. The ACP shall provide for a well coordinated response that is integrated and compatible, to the greatest extent possible, with all appropriate response plans of state, local, and non-federal entities, and especially with Title III local emergency response plans.

(3) The ACP shall include the following:

(i) A description of the area covered by the plan, including the areas of special economic or **environmental** importance that might be damaged by a discharge;

(ii) A description in detail of the responsibilities of an owner or operator and of federal, state, and local agencies in removing a discharge, and in mitigating or preventing a substantial threat of a discharge;

(iii) A list of equipment (including firefighting equipment), dispersants, or other mitigating substances and devices, and personnel available to an owner or operator and federal, state, and local agencies, to ensure an effective and immediate removal of a discharge, and to ensure mitigation or prevention of a substantial threat of a discharge (this may be provided in an appendix or by reference to other relevant emergency plans (e.g., state or LEPC plans), which may include such equipment lists);

(iv) A description of procedures to be followed for obtaining an expedited decision regarding the use of dispersants; and

(v) A detailed description of how the plan is integrated into other ACPs and tank vessel, offshore facility, and onshore facility response plans approved by the President, and into operating procedures of the NSFCC.

(4)(i) In order to provide for coordinated, immediate and effective **protection**, rescue, and rehabilitation of, and minimization of risk of injury to, fish and wildlife resources and habitat, Area Committees shall incorporate into each ACP a detailed annex containing a Fish and Wildlife and Sensitive Environments Plan that is consistent with the RCP and NCP. The annex shall be prepared in consultation with the USFWS and NOAA and other interested natural resource management agencies and parties. It shall address fish and wildlife resources and their habitat, and shall include other areas considered sensitive environments in a separate section of the annex, based upon Area Committee recommendations. The annex will provide the necessary information and procedures to immediately and effectively respond to discharges that may adversely affect fish and wildlife and their

habitat and sensitive environments, including provisions for a response to a worst case discharge. Such information shall include the identification of appropriate agencies and their responsibilities, procedures to notify these agencies following a discharge or threat of a discharge, protocols for obtaining required fish and wildlife permits and other necessary permits, and provisions to ensure compatibility of annex-related activities with removal operations.

(ii) The annex shall:

(A) Identify and establish priorities for fish and wildlife resources and their habitats and other important sensitive areas requiring **protection** from any direct or indirect effects from discharges that may occur. These effects include, but are not limited to, any seasonal or historical use, as well as all critical, special, significant, or otherwise designated protected areas.

(B) Provide a mechanism to be used during a spill response for timely identification of **protection** priorities of those fish and wildlife resources and habitats and sensitive **environmental** areas that may be threatened or injured by a discharge. These include as appropriate, not only marine and freshwater species, habitats, and their food sources, but also terrestrial wildlife and their habitats that may be affected directly by onshore oil or indirectly by oil-related factors, such as loss or contamination of forage. The mechanism shall also provide for expeditious evaluation and appropriate consultations on the effects to fish and wildlife, their habitat, and other sensitive environments from the application of chemical countermeasures or other countermeasures not addressed under paragraph (e) (4) (iii).

(C) Identify potential **environmental** effects on fish and wildlife, their habitat, and other sensitive environments resulting from removal actions or countermeasures, including the option of no removal. Based on this evaluation of potential **environmental** effects, the annex should establish priorities for application of countermeasure and removal actions to habitats within the geographic region of the ACP. The annex should establish methods to minimize the identified effects on fish and wildlife because of response activities, including, but not limited to: Disturbance of sensitive areas and habitats; illegal or inadvertent taking or disturbance of fish and wildlife or specimens by response personnel; and fish and wildlife, their habitat, and environmentally sensitive areas coming in contact with various cleaning or bioremediation agents. Furthermore, the annex should identify the areas where the movement of oiled debris may pose a risk to resident, transient, or migratory fish and wildlife, and other sensitive environments and should discuss measures to be considered for removing such oiled debris in a timely fashion to reduce such risk.

(D) Provide for pre-approval of application of specific countermeasures or removal actions that, if expeditiously applied, will minimize adverse spill-induced impacts to fish and wildlife resources, their habitat, and other sensitive environments. Such pre-approval plans must be consistent with paragraphs (c) (4) (ii) (B) and (C) of this section and subpart J requirements, and must have the concurrence of the natural resource trustees.

(E) Provide monitoring plan(s) to evaluate the effectiveness of different countermeasures or removal actions in protecting the environment. Monitoring should include ``set-aside'' or ``control'' areas, where no mitigative actions are taken.

(F) Identify and plan for the acquisition and utilization of necessary response capabilities for **protection**, rescue, and rehabilitation of fish and wildlife resources and habitat. This may include appropriately permitted private organizations and individuals

with appropriate expertise and experience. The suitable organizations should be identified in cooperation with natural resource law enforcement agencies. Such capabilities shall include, but not be limited to, identification of facilities and equipment necessary for deterring sensitive fish and wildlife from entering oiled areas, and for capturing, holding, cleaning, and releasing injured wildlife. Plans for the provision of such capabilities shall ensure that there is no interference with other OSC removal operations.

(G) Identify appropriate federal and state **agency** contacts and alternates responsible for coordination of fish and wildlife rescue and rehabilitation and **protection** of sensitive environments; identify and provide for required fish and wildlife handling and rehabilitation permits necessary under federal and state laws; and provide guidance on the implementation of law enforcement requirements included under current federal and state laws and corresponding regulations. Requirements include, but are not limited to procedures regarding the capture, transport, rehabilitation, and release of wildlife exposed to or threatened by oil, and disposal of contaminated carcasses of wildlife.

(H) Identify and secure the means for providing, if needed, the minimum required OSHA and EPA training for volunteers, including those who assist with injured wildlife.

(I) Define the requirements for evaluating the compatibility between this annex and non-federal response plans (including those of vessels, facilities, and pipelines) on issues affecting fish and wildlife, their habitat, and sensitive environments.

Sec. 300.211 OPA facility and vessel response plans.

This section describes and cross-references the regulations that implement section 311(j)(5) of the CWA. A tank vessel, as defined under section 2101 of title 46, U.S. Code, an offshore facility, and an onshore facility that, because of its location, could reasonably expect to cause substantial harm to the environment by discharging into or on the navigable waters, adjoining shorelines, or exclusive economic zone must prepare and submit a plan for responding, to the maximum extent practicable, to a worst case discharge, and to a substantial threat of such a discharge, of oil or a hazardous substance. These response plans are required to be consistent with applicable Area Contingency Plans. These regulations are codified as follows:

(a) For tank vessels, these regulations are codified in 33 **CFR part** 155;

(b) For offshore facilities, these regulations are codified in 30 **CFR part** 254;

(c) For non-transportation related onshore facilities, these regulations are codified in 40 **CFR** 112.20;

(d) For transportation-related onshore facilities, these regulations are codified in 33 **CFR part** 154;

(e) For pipeline facilities, these regulations are codified in 49 **CFR part** 194; and

(f) For rolling stock, these regulations are codified in 49 **CFR part** 106 et al.

Sec. 300.212 Area response drills.

The OSC periodically shall conduct drills of removal capability (including fish and wildlife response capability), without prior

notice, in areas for which ACPs are required by Sec. 300.210(c) and under relevant tank vessel and facility response plans.

Sec. 300.215 Title III local emergency response plans.

This section describes and cross-references the regulations that implement Title III. These regulations are codified at **40 CFR part 355**.

(a) Each LEPC is to prepare an emergency response plan in accordance with section 303 of Title III and review the plan once a year, or more frequently as changed circumstances in the community or at any facility may require. Such Title III local emergency response plans should be closely coordinated with applicable federal ACPs and state emergency response plans.

(b) [Reserved]

Sec. 300.220 Related Title III issues.

Other related Title III requirements are found in **40 CFR part 355**.

Subpart D--Operational Response Phases for Oil Removal

Sec. 300.300 Phase I--Discovery or notification.

(a) A discharge of oil may be discovered through:

- (1) A report submitted by the person in charge of a vessel or facility, in accordance with statutory requirements;
- (2) Deliberate search by patrols;
- (3) Random or incidental observation by government agencies or the public; or
- (4) Other sources.

(b) Any person in charge of a vessel or a facility shall, as soon as he or she has knowledge of any discharge from such vessel or facility in violation of section 311(b)(3) of the CWA, immediately notify the NRC. If direct reporting to the NRC is not practicable, reports may be made to the USCG or EPA predesignated OSC for the geographic area where the discharge occurs. The EPA predesignated OSC may also be contacted through the regional 24-hour emergency response telephone number. All such reports shall be promptly relayed to the NRC. If it is not possible to notify the NRC or predesignated OSC immediately, reports may be made immediately to the nearest Coast Guard unit. In any event such person in charge of the vessel or facility shall notify the NRC as soon as possible.

(c) Any other person shall, as appropriate, notify the NRC of a discharge of oil.

(d) Upon receipt of a notification of discharge, the NRC shall promptly notify the OSC. The OSC shall ensure notification of the appropriate state **agency** of any state which is, or may reasonably be expected to be, affected by the discharge. The OSC shall then proceed with the following phases as outlined in the RCP and ACP.

Sec. 300.305 Phase II--Preliminary assessment and initiation of action.

(a) The OSC is responsible for promptly initiating a preliminary assessment.

(b) The preliminary assessment shall be conducted using available information, supplemented where necessary and possible by an on-scene inspection. The OSC shall undertake actions to:

(1) Evaluate the magnitude and severity of the discharge or threat to public health or welfare of the United States or the environment;

(2) Assess the feasibility of removal; and

(3) To the extent practicable, identify potentially responsible parties.

(c) Where practicable, the framework for the response management structure is a system (e.g., a unified command system), that brings together the functions of the federal government, the state government, and the responsible party to achieve an effective and efficient response, where the OSC maintains authority.

(d) Except in a case when the OSC is required to direct the response to a discharge that may pose a substantial threat to the public health or welfare of the United States (including but not limited to fish, shellfish, wildlife, other natural resources, and the public and private beaches and shorelines of the United States), the OSC may allow the responsible party to voluntarily and promptly perform removal actions, provided the OSC determines such actions will ensure an effective and immediate removal of the discharge or mitigation or prevention of a substantial threat of a discharge. If the responsible party does conduct the removal, the OSC shall ensure adequate surveillance over whatever actions are initiated. If effective actions are not being taken to eliminate the threat, or if removal is not being properly done, the OSC should, to the extent practicable under the circumstances, so advise the responsible party. If the responsible party does not respond properly the OSC shall take appropriate response actions and should notify the responsible party of the potential liability for federal response costs incurred by the OSC pursuant to the OPA and CWA. Where practicable, continuing efforts should be made to encourage response by responsible parties.

(1) In carrying out a response under this section, the OSC may:

(i) Remove or arrange for the removal of a discharge, and mitigate or prevent a substantial threat of a discharge, at any time;

(ii) Direct or monitor all federal, state, and private actions to remove a discharge; and

(iii) Remove and, if necessary, destroy a vessel discharging, or threatening to discharge, by whatever means are available.

(2) If the discharge results in a substantial threat to the public health or welfare of the United States (including, but not limited to fish, shellfish, wildlife, other natural resources, and the public and private beaches and shorelines of the United States), the OSC must direct all response efforts, as provided in Sec. 300.322(b) of this **part**. The OSC should declare as expeditiously as practicable to spill response participants that the federal government will direct the response. The OSC may act without regard to any other provision of the law governing contracting procedures or employment of personnel by the federal government in removing or arranging for the removal of such a discharge.

(e) The OSC shall ensure that the natural resource trustees are promptly notified in the event of any discharge of oil, to the maximum extent practicable as provided in the Fish and Wildlife and Sensitive Environments Plan annex to the ACP for the area in which the discharge occurs. The OSC and the trustees shall coordinate assessments, evaluations, investigations, and planning with respect to appropriate removal actions. The OSC shall consult with the affected trustees on the appropriate removal action to be taken. The trustees will provide timely advice concerning recommended actions with regard to trustee

resources potentially affected. The trustees also will assure that the OSC is informed of their activities in natural resource damage assessment that may affect response operations. The trustees shall assure, through the lead administrative trustee, that all data from the natural resource damage assessment activities that may support more effective operational decisions are provided in a timely manner to the OSC. When circumstances permit, the OSC shall share the use of non-monetary response resources (i.e., personnel and equipment) with the trustees, provided trustee activities do not interfere with response actions. The lead administrative trustee facilitates effective and efficient communication between the OSC and the other trustees during response operations and is responsible for applying to the OSC for non-monetary federal response resources on behalf of all trustees. The lead administrative trustee is also responsible for applying to the NPFC for funding for initiation of damage assessment for injuries to natural resources.

Sec. 300.310 Phase III--Containment, countermeasures, cleanup, and disposal.

(a) Defensive actions shall begin as soon as possible to prevent, minimize, or mitigate threat(s) to the public health or welfare of the United States or the environment. Actions may include but are not limited to: Analyzing water samples to determine the source and spread of the oil; controlling the source of discharge; measuring and sampling; source and spread control or salvage operations; placement of physical barriers to deter the spread of the oil and to protect natural resources and sensitive ecosystems; control of the water discharged from upstream impoundment; and the use of chemicals and other materials in accordance with subpart J of this **part** to restrain the spread of the oil and mitigate its effects. The ACP prepared under Sec. 300.210(c) should be consulted for procedures to be followed for obtaining an expedited decision regarding the use of dispersants and other products listed on the NCP Product Schedule.

(b) As appropriate, actions shall be taken to recover the oil or mitigate its effects. Of the numerous chemical or physical methods that may be used, the chosen methods shall be the most consistent with protecting public health and welfare and the environment. Sinking agents shall not be used.

(c) Oil and contaminated materials recovered in cleanup operations shall be disposed of in accordance with the RCP, ACP, and any applicable laws, regulations, or requirements. RRT and Area Committee guidelines may identify the disposal options available during an oil spill response and may describe what disposal requirements are mandatory or may not be waived by the OSC. ACP guidelines should address: the sampling, testing, and classifying of recovered oil and oiled debris; the segregation, temporary storage, and stockpiling of recovered oil and oiled debris; prior state disposal approvals and permits; and the routes; methods (e.g. recycle/reuse, on-site burning, incineration, landfilling, etc.); and sites for the disposal of collected oil, oiled debris, and animal carcasses; and procedures for obtaining waivers, exemptions, or authorizations associated with handling or transporting waste materials. The ACPs may identify a hierarchy of preferences for disposal alternatives, with recycling (reprocessing) being the most preferred, and other alternatives preferred based on priorities for health or the environment.

Sec. 300.315 Phase IV--Documentation and cost recovery.

(a) All OSLTF users need to collect and maintain documentation to support all actions taken under the CWA. In general, documentation shall be sufficient to support full cost recovery for resources utilized and shall identify the source and circumstances of the incident, the responsible party or parties, and impacts and potential impacts to public health and welfare and the environment. Documentation procedures are contained in 33 **CFR part** 136.

(b) When appropriate, documentation shall also be collected for scientific understanding of the environment and for research and development of improved response methods and technology. Funding for these actions is restricted by section 6002 of the OPA.

(c) OSCs shall submit OSC reports to the NRT or RRT, only if requested, as provided by Sec. 300.165.

(d) OSCs shall ensure the necessary collection and safeguarding of information, samples, and reports. Samples and information shall be gathered expeditiously during the response to ensure an accurate record of the impacts incurred. Documentation materials shall be made available to the trustees of affected natural resources. The OSC shall make available to trustees of the affected natural resources information and documentation in the OSC's possession that can assist the trustees in the determination of actual or potential natural resource injuries.

(e) Information and reports obtained by the EPA or USCG OSC shall be transmitted to the appropriate offices responsible for follow-up actions.

Sec. 300.317 National response priorities.

(a) Safety of human life must be given the top priority during every response action. This includes any search and rescue efforts in the general proximity of the discharge and the insurance of safety of response personnel.

(b) Stabilizing the situation to preclude the event from worsening is the next priority. All efforts must be focused on saving a vessel that has been involved in a grounding, collision, fire, or explosion, so that it does not compound the problem. Comparable measures should be taken to stabilize a situation involving a facility, pipeline, or other source of pollution. Stabilizing the situation includes securing the source of the spill and/or removing the remaining oil from the container (vessel, tank, or pipeline) to prevent additional oil spillage, to reduce the need for follow-up response action, and to minimize adverse impact to the environment.

(c) The response must use all necessary containment and removal tactics in a coordinated manner to ensure a timely, effective response that minimizes adverse impact to the environment.

(d) All parts of this national response strategy should be addressed concurrently, but safety and stabilization are the highest priorities. The OSC should not delay containment and removal decisions unnecessarily and should take actions to minimize adverse impact to the environment that begins as soon as a discharge occurs, as well as actions to minimize further adverse **environmental** impact from additional discharges.

(e) The priorities set forth in this section are broad in nature, and should not be interpreted to preclude the consideration of other priorities that may arise on a site-specific basis.

Sec. 300.320 General pattern of response.

(a) When the OSC receives a report of a discharge, actions normally should be taken in the following sequence:

(1) Investigate the report to determine pertinent information such as the threat posed to public health or welfare of the United States or the environment, the type and quantity of polluting material, and the source of the discharge.

(2) Officially classify the size (i.e., minor, medium, major) and type (i.e., substantial threat to the public health or welfare of the United States, worst case discharge) of the discharge and determine the course of action to be followed to ensure effective and immediate removal, mitigation, or prevention of the discharge. Some discharges that are classified as a substantial threat to the public health or welfare of the United States may be further classified as a spill of national significance by the Administrator of EPA or the Commandant of the USCG. The appropriate course of action may be prescribed in Secs. 300.322, 300.323, and 300.324.

(i) When the reported discharge is an actual or potential major discharge, the OSC shall immediately notify the RRT and the NRC.

(ii) When the investigation shows that an actual or potential medium discharge exists, the OSC shall recommend activation of the RRT, if appropriate.

(iii) When the investigation shows that an actual or potential minor discharge exists, the OSC shall monitor the situation to ensure that proper removal action is being taken.

(3) If the OSC determines that effective and immediate removal, mitigation, or prevention of a discharge can be achieved by private party efforts, and where the discharge does not pose a substantial threat to the public health or welfare of the United States, determine whether the responsible party or other person is properly carrying out removal. Removal is being done properly when:

(i) The responsible party is applying the resources called for in its response plan to effectively and immediately remove, minimize, or mitigate threat(s) to public health and welfare and the environment; and

(ii) The removal efforts are in accordance with applicable regulations, including the NCP. Even if the OSC supplements responsible party resources with government resources, the spill response will not be considered improper, unless specifically determined by the OSC.

(4) Where appropriate, determine whether a state or political subdivision thereof has the capability to carry out any or all removal actions. If so, the OSC may arrange funding to support these actions.

(5) Ensure prompt notification of the trustees of affected natural resources in accordance with the applicable RCP and ACP.

(b) Removal shall be considered complete when so determined by the OSC in consultation with the Governor or Governors of the affected states. When the OSC considers removal complete, OSLTF removal funding shall end. This determination shall not preclude additional removal actions under applicable state law.

Sec. 300.322 Response to substantial threats to public health or welfare of the United States.

(a) As **part** of the investigation described in Sec. 300.320, the OSC shall determine whether a discharge results in a substantial threat to public health or welfare of the United States (including, but not

limited to, fish, shellfish, wildlife, other natural resources, and the public and private beaches and shorelines of the United States). Factors to be considered by the OSC in making this determination include, but are not limited to, the size of the discharge, the character of the discharge, and the nature of the threat to public health or welfare of the United States. Upon obtaining such information, the OSC shall conduct an evaluation of the threat posed, based on the OSC's experience in assessing other discharges, and consultation with senior lead **agency** officials and readily available authorities on issues outside the OSC's technical expertise.

(b) If the investigation by the OSC shows that the discharge poses or may present a substantial threat to public health or welfare of the United States, the OSC shall direct all federal, state, or private actions to remove the discharge or to mitigate or prevent the threat of such a discharge, as appropriate. In directing the response in such cases, the OSC may act without regard to any other provision of law governing contracting procedures or employment of personnel by the federal government to:

- (1) Remove or arrange for the removal of the discharge;
 - (2) Mitigate or prevent the substantial threat of the discharge;
- and

(3) Remove and, if necessary, destroy a vessel discharging, or threatening to discharge, by whatever means are available.

(c) In the case of a substantial threat to public health or welfare of the United States, the OSC shall:

(1) Assess opportunities for the use of various special teams and other assistance described in Sec. 300.145, including the use of the services of the NSFCC, as appropriate;

(2) Request immediate activation of the RRT; and

(3) Take whatever additional response actions are deemed appropriate, including, but not limited to, implementation of the ACP as required by section 311(j)(4) of the CWA or relevant tank vessel or facility response plan required by section 311(j)(5) of the CWA. When requested by the OSC, the lead **agency** or RRT shall dispatch appropriate personnel to the scene of the discharge to assist the OSC. This assistance may include technical support in the **agency's** areas of expertise and disseminating information to the public. The lead **agency** shall ensure that a contracting officer is available on scene, at the request of the OSC.

Sec. 300.323 Spills of national significance

(a) A discharge may be classified as a spill of national significance (SONS) by the Administrator of EPA for discharges occurring in the inland zone and the Commandant of the USCG for discharges occurring in the coastal zone.

(b) For a SONS in the inland zone, the EPA Administrator may name a senior **Agency** official to assist the OSC in communicating with affected parties and the public and coordinating federal, state, local, and international resources at the national level. This strategic coordination will involve, as appropriate, the NRT, RRT(s), the Governor(s) of affected state(s), and the mayor(s) or other chief executive(s) of local government(s).

(c) For a SONS in the coastal zone, the USCG Commandant may name a National Incident Commander (NIC) who will assume the role of the OSC in communicating with affected parties and the public, and coordinating federal, state, local, and international resources at the national level. This strategic coordination will involve, as appropriate, the

NRT, RRT(s), the Governor(s) of affected state(s), and the mayor(s) or other chief executive(s) of local government(s).

Sec. 300.324 Response to worst case discharges.

(a) If the investigation by the OSC shows that a discharge is a worst case discharge as defined in the ACP, or there is a substantial threat of such a discharge, the OSC shall:

- (1) Notify the NSFCC;
- (2) Require, where applicable, implementation of the worst case portion of an approved tank vessel or facility response plan required by section 311(j)(5) of the CWA;
- (3) Implement the worst case portion of the ACP required by section 311(j)(4) of the CWA; and
- (4) Take whatever additional response actions are deemed appropriate.

(b) Under the direction of the OSC, the NSFCC shall coordinate use of private and public personnel and equipment, including strike teams to remove a worst case discharge and mitigate or prevent a substantial threat of such a discharge.

Sec. 300.335 Funding.

(a) The OSLTF is available under certain circumstances to fund removal of oil performed under section 311 of the CWA. Those circumstances and the procedures for accessing the OSLTF are described in 33 **CFR part** 136. The responsible party is liable for costs of federal removal and damages in accordance with section 311(f) of the CWA, section 1002 of the OPA, and other federal laws.

(b) Where the OSC requests assistance from a federal **agency**, that **agency** may be reimbursed in accordance with the provisions of 33 **CFR part** 136. Specific interagency reimbursement agreements may be used when necessary to ensure that the federal resources will be available for a timely response to a discharge of oil.

(c) Procedures for funding the initiation of natural resource damage assessment are covered in 33 **CFR part** 136.

(d) Response actions other than removal, such as scientific investigations not in support of removal actions or law enforcement, shall be provided by the **agency** with legal responsibility for those specific actions.

(e) The funding of a response to a discharge from a federally owned, operated, or supervised facility or vessel is the responsibility of the owning, operating, or supervising **agency** if it is a responsible party.

(f) The following agencies have funds available for certain discharge removal actions:

(1) DOD has two specific sources of funds that may be applicable to an oil discharge under appropriate circumstances. This does not consider military resources that might be made available under specific conditions.

(i) Funds required for removal of a sunken vessel or similar obstruction of navigation are available to the Corps of Engineers through Civil Works Appropriations, Operations and Maintenance, General.

(ii) USN may conduct salvage operations contingent on defense operational commitments, when funded by the requesting **agency**. Such funding may be requested on a direct cite basis.

(2) Pursuant to Title I of the OPA, the state or states affected by a discharge of oil may act where necessary to remove such discharge. Pursuant to 33 **CFR part** 136 states may be reimbursed from the OSLTF for the reasonable costs incurred in such a removal.

Subpart E--Hazardous Substance Response

5. Section **300.400** is amended by revising paragraph (a) to read as follows:

Sec. **300.400** General.

(a) This subpart establishes methods and criteria for determining the appropriate extent of response authorized by CERCLA and CWA section 311(c):

(1) When there is a release of a hazardous substance into the environment; or

(2) When there is a release into the environment of any pollutant or contaminant that may present an imminent and substantial danger to the public health or welfare of the United States.

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6. Section **300.405** is amended by revising paragraphs (a) and (f) (3) to read as follows:

Sec. **300.405** Discovery or notification.

(a) A release may be discovered through:

(1) A report submitted in accordance with section 103(a) of CERCLA, i.e., reportable quantities codified at **40 CFR part** 302;

(2) A report submitted to EPA in accordance with section 103(c) of CERCLA;

(3) Investigation by government authorities conducted in accordance with section 104(e) of CERCLA or other statutory authority;

(4) Notification of a release by a federal or state permit holder when required by its permit;

(5) Inventory or survey efforts or random or incidental observation reported by government agencies or the public;

(6) Submission of a citizen petition to EPA or the appropriate federal facility requesting a preliminary assessment, in accordance with section 105(d) of CERCLA;

(7) A report submitted in accordance with section 311(b) (5) of the CWA; and

(8) Other sources.

* * * * *

(f) * * *

(3) If radioactive substances are present in a release, the EPA Radiological Response Coordinator should be notified for evaluation and assistance either directly or via the NRC, consistent with Secs. **300.130(e)** and **300.145(f)**.

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7. Section **300.410** is revised to read as follows:

Sec. **300.410** Removal site evaluation.

(a) A removal site evaluation includes a removal preliminary assessment and, if warranted, a removal site inspection.

(b) A removal site evaluation of a release identified for possible CERCLA response pursuant to Sec. 300.415 shall, as appropriate, be undertaken by the lead **agency** as promptly as possible. The lead **agency** may perform a removal preliminary assessment in response to petitions submitted by a person who is, or may be, affected by a release of a hazardous substance, pollutant, or contaminant pursuant to Sec. 300.420(b)(5).

(c)(1) The lead **agency** shall, as appropriate, base the removal preliminary assessment on readily available information. A removal preliminary assessment may include, but is not limited to:

- (i) Identification of the source and nature of the release or threat of release;
- (ii) Evaluation by ATSDR or by other sources, for example, state public health agencies, of the threat to public health;
- (iii) Evaluation of the magnitude of the threat;
- (iv) Evaluation of factors necessary to make the determination of whether a removal is necessary; and
- (v) Determination of whether a nonfederal party is undertaking proper response.

(2) A removal preliminary assessment of releases from hazardous waste management facilities may include collection or review of data such as site management practices, information from generators, photographs, analysis of historical photographs, literature searches, and personal interviews conducted, as appropriate.

(d) A removal site inspection may be performed if more information is needed. Such inspection may include a perimeter (i.e., off-site) or on-site inspection, taking into consideration whether such inspection can be performed safely.

(e)(1) As **part** of the evaluation under this section, the OSC shall determine whether a release governed by CWA section 311(c)(1), as amended by OPA section 4201(a), has occurred.

(2) If such a release of a CWA hazardous substance has occurred, the OSC shall determine whether the release results in a substantial threat to the public health or welfare of the United States. Factors to be considered by the OSC in making this determination include, but are not limited to, the size of the release, the character of the release, and the nature of the threat to public health or welfare of the United States. Upon obtaining relevant elements of such information, the OSC shall conduct an evaluation of the threat posed, based on the OSC's experience in assessing other releases, and consultation with senior lead **agency** officials and readily available authorities on issues outside the OSC's technical expertise.

(f) A removal site evaluation shall be terminated when the OSC or lead **agency** determines:

- (1) There is no release;
 - (2) The source is neither a vessel nor a facility as defined in Sec. 300.5 of the NCP;
 - (3) The release involves neither a hazardous substance, nor a pollutant or contaminant that may present an imminent and substantial danger to public health or welfare of the United States;
 - (4) The release consists of a situation specified in Sec. 300.400(b)(1) through (3) subject to limitations on response;
 - (5) The amount, quantity, or concentration released does not warrant federal response;
 - (6) A party responsible for the release, or any other person, is providing appropriate response, and on-scene monitoring by the government is not required; or
 - (7) The removal site evaluation is completed.
- (g) The results of the removal site evaluation shall be documented.

(h) The OSC or lead **agency** shall ensure that natural resource trustees are promptly notified in order that they may initiate appropriate actions, including those identified in Subpart G of this **part**. The OSC or lead **agency** shall coordinate all response activities with such affected trustees.

(i) If the removal site evaluation indicates that removal action under Sec. 300.415 is not required, but that remedial action under Sec. 300.430 may be necessary, the lead **agency** shall, as appropriate, initiate a remedial site evaluation pursuant to Sec. 300.420.

8. Section 300.415 is revised to read as follows:

Sec. 300.415 Removal action.

(a)(1) In determining the appropriate extent of action to be taken in response to a given release, the lead **agency** shall first review the removal site evaluation, any information produced through a remedial site evaluation, if any has been done previously, and the current site conditions, to determine if removal action is appropriate.

(2) Where the responsible parties are known, an effort initially shall be made, to the extent practicable, to determine whether they can and will perform the necessary removal action promptly and properly.

(3) This section does not apply to removal actions taken pursuant to section 104(b) of CERCLA. The criteria for such actions are set forth in section 104(b) of CERCLA.

(b)(1) At any release, regardless of whether the site is included on the National Priorities List (NPL), where the lead **agency** makes the determination, based on the factors in paragraph (b)(2) of this section, that there is a threat to public health or welfare of the United States or the environment, the lead **agency** may take any appropriate removal action to abate, prevent, minimize, stabilize, mitigate, or eliminate the release or the threat of release.

(2) The following factors shall be considered in determining the appropriateness of a removal action pursuant to this section:

(i) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;

(ii) Actual or potential contamination of drinking water supplies or sensitive ecosystems;

(iii) Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release;

(iv) High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate;

(v) Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;

(vi) Threat of fire or explosion;

(vii) The availability of other appropriate federal or state response mechanisms to respond to the release; and

(viii) Other situations or factors that may pose threats to public health or welfare of the United States or the environment.

(3) If the lead **agency** determines that a removal action is appropriate, actions shall, as appropriate, begin as soon as possible to abate, prevent, minimize, stabilize, mitigate, or eliminate the threat to public health or welfare of the United States or the environment. The lead **agency** shall, at the earliest possible time, also make any necessary determinations pursuant to paragraph (b)(4) of this section.

(4) Whenever a planning period of at least six months exists before on-site activities must be initiated, and the lead **agency** determines, based on a site evaluation, that a removal action is appropriate:

(i) The lead **agency** shall conduct an engineering evaluation/cost analysis (EE/CA) or its equivalent. The EE/CA is an analysis of removal alternatives for a site.

(ii) If **environmental** samples are to be collected, the lead **agency** shall develop sampling and analysis plans that shall provide a process for obtaining data of sufficient quality and quantity to satisfy data needs. Sampling and analysis plans shall be reviewed and approved by EPA. The sampling and analysis plans shall consist of two parts:

(A) The field sampling plan, which describes the number, type, and location of samples and the type of analyses; and

(B) The quality assurance project plan, which describes policy, organization, and functional activities and the data quality objectives and measures necessary to achieve adequate data for use in planning and documenting the removal action.

(5) CERCLA fund-financed removal actions, other than those authorized under section 104(b) of CERCLA, shall be terminated after \$2 million has been obligated for the action or 12 months have elapsed from the date that removal activities begin on-site, unless the lead **agency** determines that:

(i) There is an immediate risk to public health or welfare of the United States or the environment; continued response actions are immediately required to prevent, limit, or mitigate an emergency; and such assistance will not otherwise be provided on a timely basis; or

(ii) Continued response action is otherwise appropriate and consistent with the remedial action to be taken.

(c)(1) In carrying out a response to a release of a CWA hazardous substance, as described in CWA section 311(c)(1), as amended by OPA section 4201(a), the OSC may:

(i) Remove or arrange for the removal of a release, and mitigate or prevent a substantial threat of a release, at any time;

(ii) Direct or monitor all federal, state, and private actions to remove a release; and

(iii) Remove and, if necessary, destroy a vessel releasing or threatening to release CWA hazardous substances, by whatever means are available.

(2) If the investigation by the OSC under Sec. 300.410 shows that the release of a CWA hazardous substance results in a substantial threat to public health or welfare of the United States, the OSC shall direct all federal, state, or private actions to remove the release or to mitigate or prevent the threat of such a release, as appropriate. In directing the response, the OSC may act without regard to any other provision of law governing contracting procedures or employment of personnel by the federal government to:

(i) Remove or arrange for the removal of the release;

(ii) Mitigate or prevent the substantial threat of the release; and

(iii) Remove and, if necessary, destroy a vessel releasing, or threatening to release, by whatever means are available.

(3) In the case of a release of a CWA hazardous substance posing a substantial threat to public health or welfare of the United States, the OSC shall:

(i) Assess opportunities for the use of various special teams and other assistance described in Sec. 300.145, as appropriate;

(ii) Request immediate activation of the RRT; and

(iii) Take whatever additional response actions are deemed appropriate. When requested by the OSC, the lead **agency** or RRT shall dispatch appropriate personnel to the scene of the release to assist

the OSC. This assistance may include technical support in the **agency's** areas of expertise and disseminating information to the public in accordance with Sec. 300.155. The lead **agency** shall ensure that a contracting officer is available on-scene, at the request of the OSC.

(d) Removal actions shall, to the extent practicable, contribute to the efficient performance of any anticipated long-term remedial action with respect to the release concerned.

(e) The following removal actions are, as a general rule, appropriate in the types of situations shown; however, this list is not exhaustive and is not intended to prevent the lead **agency** from taking any other actions deemed necessary under CERCLA, CWA section 311, or other appropriate federal or state enforcement or response authorities, and the list does not create a duty on the lead **agency** to take action at any particular time:

(1) Fences, warning signs, or other security or site control precautions--where humans or animals have access to the release;

(2) Drainage controls, for example, run-off or run-on diversion--where needed to reduce migration of hazardous substances or pollutants or contaminants off-site or to prevent precipitation or run-off from other sources, for example, flooding, from entering the release area from other areas;

(3) Stabilization of berms, dikes, or impoundments or drainage or closing of lagoons--where needed to maintain the integrity of the structures;

(4) Capping of contaminated soils or sludges--where needed to reduce migration of hazardous substances or pollutants or contaminants into soil, ground or surface water, or air;

(5) Using chemicals and other materials to retard the spread of the release or to mitigate its effects--where the use of such chemicals will reduce the spread of the release;

(6) Excavation, consolidation, or removal of highly contaminated soils from drainage or other areas--where such actions will reduce the spread of, or direct contact with, the contamination;

(7) Removal of drums, barrels, tanks, or other bulk containers that contain or may contain hazardous substances or pollutants or contaminants--where it will reduce the likelihood of spillage; leakage; exposure to humans, animals, or food chain; or fire or explosion;

(8) Containment, treatment, disposal, or incineration of hazardous materials--where needed to reduce the likelihood of human, animal, or food chain exposure; or

(9) Provision of alternative water supply--where necessary immediately to reduce exposure to contaminated household water and continuing until such time as local authorities can satisfy the need for a permanent remedy.

(f) Where necessary to protect public health or welfare, the lead **agency** shall request that FEMA conduct a temporary relocation or that state/local officials conduct an evacuation.

(g) If the lead **agency** determines that the removal action will not fully address the threat posed by the release and the release may require remedial action, the lead **agency** shall ensure an orderly transition from removal to remedial response activities.

(h) CERCLA removal actions conducted by states under cooperative agreements, described in subpart F of this **part**, shall comply with all requirements of this section.

(i) Facilities operated by a state or political subdivision at the time of disposal require a state cost share of at least 50 percent of Fund-financed response costs if a Fund-financed remedial action is conducted.

(j) Fund-financed removal actions under CERCLA section 104 and

removal actions pursuant to CERCLA section 106 shall, to the extent practicable considering the exigencies of the situation, attain applicable or relevant and appropriate requirements (ARARs) under federal **environmental** or state **environmental** or facility siting laws. Waivers described in Sec. 300.430(f)(1)(ii)(C) may be used for removal actions. Other federal and state advisories, criteria, or guidance may, as appropriate, be considered in formulating the removal action (see Sec. 300.400(g)(3)). In determining whether compliance with ARARs is practicable, the lead **agency** may consider appropriate factors, including:

- (1) The urgency of the situation; and
- (2) The scope of the removal action to be conducted.

(k) Removal actions pursuant to section 106 or 122 of CERCLA are not subject to the following requirements of this section:

- (1) Section 300.415(a)(2) requirement to locate responsible parties and have them undertake the response;

- (2) Section 300.415(b)(2)(vii) requirement to consider the availability of other appropriate federal or state response and enforcement mechanisms to respond to the release;

- (3) Section 300.415(b)(5) requirement to terminate response after \$2 million has been obligated or 12 months have elapsed from the date of the initial response; and

- (4) Section 300.415(g) requirement to assure an orderly transition from removal to remedial action.

(1) To the extent practicable, provision for post-removal site control following a CERCLA Fund-financed removal action at both NPL and non-NPL sites is encouraged to be made prior to the initiation of the removal action. Such post-removal site control includes actions necessary to ensure the effectiveness and integrity of the removal action after the completion of the on-site removal action or after the \$2 million or 12-month statutory limits are reached for sites that do not meet the exemption criteria in paragraph (b)(5) of this section. Post-removal site control may be conducted by:

- (1) The affected state or political subdivision thereof or local units of government for any removal;

- (2) Potentially responsible parties; or

- (3) EPA's remedial program for some federal-lead Fund-financed responses at NPL sites.

(m) OSCs/RPMs conducting removal actions shall submit OSC reports to the RRT as required by Sec. 300.165.

(n) Community relations in removal actions. (1) In the case of all CERCLA removal actions taken pursuant to Sec. 300.415 or CERCLA enforcement actions to compel removal response, a spokesperson shall be designated by the lead **agency**. The spokesperson shall inform the community of actions taken, respond to inquiries, and provide information concerning the release. All news releases or statements made by participating agencies shall be coordinated with the OSC/RPM. The spokesperson shall notify, at a minimum, immediately affected citizens, state and local officials, and, when appropriate, civil defense or emergency management agencies.

(2) For CERCLA actions where, based on the site evaluation, the lead **agency** determines that a removal is appropriate, and that less than six months exists before on-site removal activity must begin, the lead **agency** shall:

- (i) Publish a notice of availability of the administrative record file established pursuant to Sec. 300.820 in a major local newspaper of general circulation within 60 days of initiation of on-site removal activity;

(ii) Provide a public comment period, as appropriate, of not less than 30 days from the time the administrative record file is made available for public inspection, pursuant to Sec. 300.820(b)(2); and

(iii) Prepare a written response to significant comments pursuant to Sec. 300.820(b)(3).

(3) For CERCLA removal actions where on-site action is expected to extend beyond 120 days from the initiation of on-site removal activities, the lead **agency** shall by the end of the 120-day period:

(i) Conduct interviews with local officials, community residents, public interest groups, or other interested or affected parties, as appropriate, to solicit their concerns, information needs, and how or when citizens would like to be involved in the Superfund process;

(ii) Prepare a formal community relations plan (CRP) based on the community interviews and other relevant information, specifying the community relations activities that the lead **agency** expects to undertake during the response; and

(iii) Establish at least one local information repository at or near the location of the response action. The information repository should contain items made available for public information. Further, an administrative record file established pursuant to subpart I for all removal actions shall be available for public inspection in at least one of the repositories. The lead **agency** shall inform the public of the establishment of the information repository and provide notice of availability of the administrative record file for public review. All items in the repository shall be available for public inspection and copying.

(4) Where, based on the site evaluation, the lead **agency** determines that a CERCLA removal action is appropriate and that a planning period of at least six months exists prior to initiation of the on-site removal activities, the lead **agency** shall at a minimum:

(i) Comply with the requirements set forth in paragraphs (n)(3) (i), (ii), and (iii) of this section, prior to the completion of the EE/CA, or its equivalent, except that the information repository and the administrative record file will be established no later than when the EE/CA approval memorandum is signed;

(ii) Publish a notice of availability and brief description of the EE/CA in a major local newspaper of general circulation pursuant to Sec. 300.820;

(iii) Provide a reasonable opportunity, not less than 30 calendar days, for submission of written and oral comments after completion of the EE/CA pursuant to Sec. 300.820(a). Upon timely request, the lead **agency** will extend the public comment period by a minimum of 15 days; and (iv) Prepare a written response to significant comments pursuant to Sec. 300.820(a).

9. Subpart G is revised to read as follows:

Subpart G--Trustees for Natural Resources

300.600 Designation of federal trustees.

300.605 State trustees.

300.610 Indian tribes.

300.612 Foreign trustees.

300.615 Responsibilities of trustees.

Subpart G--Trustees for Natural Resources

Sec. 300.600 Designation of federal trustees.

(a) The President is required to designate in the NCP those federal officials who are to act on behalf of the public as trustees for natural resources. Federal officials so designated will act pursuant to section 107(f) of CERCLA, section 311(f)(5) of the CWA, and section 1006 of the OPA. Natural resources means land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled (hereinafter referred to as ``managed or controlled'') by the United States (including the resources of the exclusive economic zone).

(b) The following individuals shall be the designated trustee(s) for general categories of natural resources, including their supporting ecosystems. They are authorized to act pursuant to section 107(f) of CERCLA, section 311(f)(5) of the CWA, or section 1006 of the OPA when there is injury to, destruction of, loss of, or threat to natural resources, including their supporting ecosystems, as a result of a release of a hazardous substance or a discharge of oil. Notwithstanding the other designations in this section, the Secretaries of Commerce and the Interior shall act as trustees of those resources subject to their respective management or control.

(1) Secretary of Commerce. The Secretary of Commerce shall act as trustee for natural resources managed or controlled by DOC and for natural resources managed or controlled by other federal agencies and that are found in, under, or using waters navigable by deep draft vessels, tidally influenced waters, or waters of the contiguous zone, the exclusive economic zone, and the outer continental shelf. However, before the Secretary takes an action with respect to an affected resource under the management or control of another federal **agency**, he shall, whenever practicable, seek to obtain the concurrence of that other federal **agency**. Examples of the Secretary's trusteeship include the following natural resources and their supporting ecosystems: marine fishery resources; anadromous fish; endangered species and marine mammals; and the resources of National Marine Sanctuaries and National Estuarine Research Reserves.

(2) Secretary of the Interior. The Secretary of the Interior shall act as trustee for natural resources managed or controlled by the DOI. Examples of the Secretary's trusteeship include the following natural resources and their supporting ecosystems: migratory birds; anadromous fish; endangered species and marine mammals; federally owned minerals; and certain federally managed water resources. The Secretary of the Interior shall also be trustee for those natural resources for which an Indian tribe would otherwise act as trustee in those cases where the United States acts on behalf of the Indian tribe.

(3) Secretary for the land managing **agency**. For natural resources located on, over, or under land administered by the United States, the trustee shall be the head of the department in which the land managing **agency** is found. The trustees for the principal federal land managing agencies are the Secretaries of DOI, USDA, DOD, and DOE.

(4) Head of authorized agencies. For natural resources located in the United States but not otherwise described in this section, the trustee shall be the head of the federal **agency** or agencies authorized to manage or control those resources.

Sec. 300.605 State trustees.

State trustees shall act on behalf of the public as trustees for natural resources, including their supporting ecosystems, within the

boundary of a state or belonging to, managed by, controlled by, or appertaining to such state. For the purposes of subpart G of this **part**, the definition of the term ``state'' does not include Indian tribes. The governor of a state is encouraged to designate a state lead trustee to coordinate all state trustee responsibilities with other trustee agencies and with response activities of the RRT and OSC. The state's lead trustee would designate a representative to serve as contact with the OSC. This individual should have ready access to appropriate state officials with **environmental protection**, emergency response, and natural resource responsibilities. The EPA Administrator or USCG Commandant or their designees may appoint the state lead trustee as a member of the Area Committee. Response strategies should be coordinated between the state and other trustees and the OSC for specific natural resource locations in an inland or coastal zone and should be included in the Fish and Wildlife and Sensitive Environments Plan annex of the ACP.

Sec. 300.610 Indian tribes.

The tribal chairmen (or heads of the governing bodies) of Indian tribes, as defined in Sec. 300.5, or a person designated by the tribal officials, shall act on behalf of the Indian tribes as trustees for the natural resources, including their supporting ecosystems, belonging to, managed by, controlled by, or appertaining to such Indian tribe, or held in trust for the benefit of such Indian tribe, or belonging to a member of such Indian tribe, if such resources are subject to a trust restriction on alienation. When the tribal chairman or head of the tribal governing body designates another person as trustee, the tribal chairman or head of the tribal governing body shall notify the President of such designation. Such officials are authorized to act when there is injury to, destruction of, loss of, or threat to natural resources, including their supporting ecosystems as a result of a release of a hazardous substance.

Sec. 300.612 Foreign trustees.

Pursuant to section 1006 of the OPA, foreign trustees shall act on behalf of the head of a foreign government as trustees for natural resources belonging to, managed by, controlled by, or appertaining to such foreign government.

Sec. 300.615 Responsibilities of trustees.

(a) Where there are multiple trustees, because of coexisting or contiguous natural resources or concurrent jurisdictions, they should coordinate and cooperate in carrying out these responsibilities.

(b) Trustees are responsible for designating to the RRTs and the Area Committees, for inclusion in the RCP and the ACP, appropriate contacts to receive notifications from the OSCs/RPMs of discharges or releases.

(c)(1) Upon notification or discovery of injury to, destruction of, loss of, or threat to natural resources, trustees may, pursuant to section 107(f) of CERCLA, or section 311(f)(5) of the CWA, take the following or other actions as appropriate:

(i) Conduct a preliminary survey of the area affected by the discharge or release to determine if trust resources under their jurisdiction are, or potentially may be, affected;

(ii) Cooperate with the OSC/RPM in coordinating assessments, investigations, and planning;

(iii) Carry out damage assessments; or

(iv) Devise and carry out a plan for restoration, rehabilitation, replacement, or acquisition of equivalent natural resources. In assessing damages to natural resources, the federal, state, and Indian tribe trustees have the option of following the procedures for natural resource damage assessments located at 43 **CFR part 11**.

(2) Upon notification or discovery of injury to, destruction of, loss of, or loss of use of, natural resources, or the potential for such, resulting from a discharge of oil occurring after August 18, 1990, the trustees, pursuant to section 1006 of the OPA, are to take the following actions:

(i) In accordance with OPA section 1006(c), determine the need for assessment of natural resource damages, collect data necessary for a potential damage assessment, and, where appropriate, assess damages to natural resources under their trusteeship; and

(ii) As appropriate, and subject to the public participation requirements of OPA section 1006(c), develop and implement a plan for the restoration, rehabilitation, replacement, or acquisition of the equivalent, of the natural resources under their trusteeship;

(3)(i) The trustees, consistent with procedures specified in the Fish and Wildlife and Sensitive Environments Plan Annex to the Area Contingency Plan, shall provide timely advice on recommended actions concerning trustee resources that are potentially affected by a discharge of oil. This may include providing assistance to the OSC in identifying/recommending pre-approved response techniques and in predesignating shoreline types and areas in ACPs.

(ii) The trustees shall assure, through the lead administrative trustee, that the OSC is informed of their activities regarding natural resource damage assessment that may affect response operations in order to assure coordination and minimize any interference with such operations. The trustees shall assure, through the lead administrative trustee, that all data from the natural resource damage assessment activities that may support more effective operational decisions are provided in a timely manner to the OSC.

(iii) When circumstances permit, the OSC shall share the use of federal response resources (including but not limited to aircraft, vessels, and booms to contain and remove discharged oil) with the trustees, providing trustee activities do not interfere with response actions. The lead administrative trustee facilitates effective and efficient communication between the OSC and the other trustees during response operations and is responsible for applying to the OSC for non-monetary federal response resources on behalf of all trustees. The lead administrative trustee is also responsible for applying to the NPFC for funding for initiation of damage assessment for injuries to natural resources.

(d) The authority of federal trustees includes, but is not limited to the following actions:

(1) Requesting that the Attorney General seek compensation from the responsible parties for the damages assessed and for the costs of an assessment and of restoration planning; and

(2) Participating in negotiations between the United States and potentially responsible parties to obtain PRP-financed or PRP-conducted assessments and restorations for injured resources or **protection** for threatened resources and to agree to covenants not to sue, where appropriate.

(3) Requiring, in consultation with the lead **agency**, any person to comply with the requirements of CERCLA section 104(e) regarding

information gathering and access.

(4) Initiating damage assessments, as provided in OPA section 6002.

(e) Actions which may be taken by any trustee pursuant to section 107(f) of CERCLA, section 311(f)(5) of the CWA, or section 1006 of the OPA include, but are not limited to, any of the following:

(1) Requesting that an authorized **agency** issue an administrative order or pursue injunctive relief against the parties responsible for the discharge or release; or

(2) Requesting that the lead **agency** remove, or arrange for the removal of, or provide for remedial action with respect to, any oil or hazardous substances from a contaminated medium pursuant to section 104 of CERCLA or section 311 of CWA.

10. Subpart H is revised to read as follows:

Subpart H--Participation by Other Persons

300.700 Activities by other persons.

Subpart H--Participation by Other Persons

Sec. **300.700** Activities by other persons.

(a) General. Except as provided (e.g., in CWA section 311(c)), an person may undertake a response action to reduce or eliminate a release of a hazardous substance, pollutant, or contaminant.

(b) Summary of CERCLA authorities. The mechanisms available to recover the costs of response actions under CERCLA are, in summary:

(1) Section 107(a), wherein any person may receive a court award of his or her response costs, plus interest, from the party or parties found to be liable;

(2) Section 111(a)(2), wherein a private party, a PRP pursuant to a settlement agreement, or certain foreign entities may file a claim against the Fund for reimbursement of response costs;

(3) Section 106(b), wherein any person who has complied with a section 106(a) order may petition the Fund for reimbursement of reasonable costs, plus interest; and

(4) Section 123, wherein a general purpose unit of local government may apply to the Fund under **40 CFR part** 310 for reimbursement of the costs of temporary emergency measures that are necessary to prevent or mitigate injury to human health or the environment associated with a release.

(c) Section 107(a) cost recovery actions. (1) Responsible parties shall be liable for all response costs incurred by the United States government or a state or an Indian tribe not inconsistent with the NCP.

(2) Responsible parties shall be liable for necessary costs of response actions to releases of hazardous substances incurred by any other person consistent with the NCP.

(3) For the purpose of cost recovery under section 107(a)(4)(B) of CERCLA:

(i) A private party response action will be considered ``consistent with the NCP'' if the action, when evaluated as a whole, is in substantial compliance with the applicable requirements in paragraphs (5) and (6) of this section, and results in a CERCLA-quality cleanup; and

(ii) Any response action carried out in compliance with the terms of an order issued by EPA pursuant to section 106 of CERCLA, or a consent decree entered into pursuant to section 122 of CERCLA, will be considered ``consistent with the NCP.''

(4) Actions under Sec. 300.700(c)(1) will not be considered ``inconsistent with the NCP,' ' and actions under Sec. 300.700(c)(2) will not be considered not ``consistent with the NCP,' ' based on immaterial or insubstantial deviations from the provisions of 40 CFR **part 300**.

(5) The following provisions of this **Part** are potentially applicable to private party response actions:

- (i) Section 300.150 (on worker health and safety);
- (ii) Section 300.160 (on documentation and cost recovery);
- (iii) Section 300.400(c)(1), (4), (5), and (7) (on determining the need for a Fund-financed action); (e) (on permit requirements) except that the permit waiver does not apply to private party response actions; and (g) (on identification of ARARs) except that applicable requirements of federal or state law may not be waived by a private party;
- (iv) Section 300.405(b), (c), and (d) (on reports of releases to the NRC);
- (v) Section 300.410 (on removal site evaluation) except paragraphs (f)(5) and (6);
- (vi) Section 300.415 (on removal actions) except paragraphs (a)(2), (b)(2)(vii), (b)(5), and (g); and including Sec. 300.415(j) with regard to meeting ARARs where practicable except that private party removal actions must always comply with the requirements of applicable law;
- (vii) Section 300.420 (on remedial site evaluation);
- (viii) Section 300.430 (on RI/FS and selection of remedy) except paragraph (f)(1)(ii)(C)(6) and that applicable requirements of federal or state law may not be waived by a private party; and
- (ix) Section 300.435 (on RD/RA and operation and maintenance).

(6) Private parties undertaking response actions should provide an opportunity for public comment concerning the selection of the response action based on the provisions set out below, or based on substantially equivalent state and local requirements. The following provisions of this **part** regarding public participation are potentially applicable to private party response actions, with the exception of administrative record and information repository requirements stated therein:

- (i) Section 300.155 (on public information and community relations);
- (ii) Section 300.415(n) (on community relations during removal actions);
- (iii) Section 300.430(c) (on community relations during RI/FS) except paragraph (c)(5);
- (iv) Section 300.430(f)(2), (3), and (6) (on community relations during selection of remedy); and
- (v) Section 300.435(c) (on community relations during RD/RA and operation and maintenance).

(7) When selecting the appropriate remedial action, the methods of remedying releases listed in Appendix D of this **part** may also be appropriate to a private party response action.

(8) Except for actions taken pursuant to CERCLA sections 104 or 106 or response actions for which reimbursement from the Fund will be sought, any action to be taken by the lead **agency** listed in paragraphs (c)(5) through (c)(7) may be taken by the person carrying out the response action.

(d) Section 111(a)(2) claims. (1) Persons, other than those listed in paragraphs (d)(1)(i) through (iii) of this section, may be able to receive reimbursement of response costs by means of a claim against the Fund. The categories of persons excluded from pursuing this claims

authority are:

- (i) Federal government;
- (ii) State governments, and their political subdivisions, unless they are potentially responsible parties covered by an order or consent decree pursuant to section 122 of CERCLA; and
- (iii) Persons operating under a procurement contract or an assistance agreement with the United States with respect to matters covered by that contract or assistance agreement, unless specifically provided therein.

(2) In order to be reimbursed by the Fund, an eligible person must notify the Administrator of EPA or designee prior to taking a response action and receive prior approval, i.e., ``preauthorization,'' for such action.

(3) Preauthorization is EPA's prior approval to submit a claim against the Fund for necessary response costs incurred as a result of carrying out the NCP. All applications for preauthorization will be reviewed to determine whether the request should receive priority for funding. EPA, in its discretion, may grant preauthorization of a claim. Preauthorization will be considered only for:

- (i) Removal actions pursuant to Sec. 300.415;
- (ii) CERCLA section 104(b) activities; and
- (iii) Remedial actions at National Priorities List sites pursuant to Sec. 300.435.

(4) To receive EPA's prior approval, the eligible person must:

- (i) Demonstrate technical and other capabilities to respond safely and effectively to releases of hazardous substances, pollutants, or contaminants; and

(ii) Establish that the action will be consistent with the NCP in accordance with the elements set forth in paragraphs (c) (5) through (8) of this section.

(5) EPA will grant preauthorization to a claim by a party it determines to be potentially liable under section 107 of CERCLA only in accordance with an order issued pursuant to section 106 of CERCLA, or a settlement with the federal government in accordance with section 122 of CERCLA.

(6) Preauthorization does not establish an enforceable contractual relationship between EPA and the claimant.

(7) Preauthorization represents EPA's commitment that if funds are appropriated for response actions, the response action is conducted in accordance with the preauthorization decision document, and costs are reasonable and necessary, reimbursement will be made from the Superfund, up to the maximum amount provided in the preauthorization decision document.

(8) For a claim to be awarded under section 111 of CERCLA, EPA must certify that the costs were necessary and consistent with the preauthorization decision document.

(e) Section 106(b) petition. Subject to conditions specified in CERCLA section 106(b), any person who has complied with an order issued after October 16, 1986 pursuant to section 106(a) of CERCLA, may seek reimbursement for response costs incurred in complying with that order unless the person has waived that right.

(f) Section 123 reimbursement to local governments. Any general purpose unit of local government for a political subdivision that is affected by a release may receive reimbursement for the costs of temporary emergency measures necessary to prevent or mitigate injury to human health or the environment subject to the conditions set forth in **40 CFR part 310**. Such reimbursement may not exceed \$25,000 for a single response.

(g) Release From Liability. Implementation of response measures by

potentially responsible parties or by any other person does not release those parties from liability under section 107(a) of CERCLA, except as provided in a settlement under section 122 of CERCLA or a federal court judgment.

(h) Oil Pollution Act Claims. Claims are authorized to be presented to the OSLTF under section 1013 of the OPA, for certain uncompensated removal costs or uncompensated damages resulting from the discharge, or substantial threat of discharge, of oil from a vessel or facility into or upon the navigable waters, adjoining shorelines, or exclusive economic zone of the United States. Anyone desiring to file a claim against the OSLTF may obtain general information on the procedure for filing a claim from the Director, National Pollution Funds Center, Suite 1000, 4200 Wilson Boulevard, Arlington, Virginia 22203-1804, (703) 235-4756.

11. Subpart J is revised to read as follows:

Subpart J--Use of Dispersants and Other Chemicals

- 300.900 General.
- 300.905 NCP Product Schedule.
- 300.910 Authorization of use.
- 300.915 Data requirements.
- 300.920 Addition of products to schedule.

Subpart J--Use of Dispersants and Other Chemicals

Sec. 300.900 General.

(a) Section 311(d)(2)(G) of the CWA requires that EPA prepare a schedule of dispersants, other chemicals, and other spill mitigating devices and substances, if any, that may be used in carrying out the NCP. This subpart makes provisions for such a schedule.

(b) This subpart applies to the navigable waters of the United States and adjoining shorelines, the waters of the contiguous zone, and the high seas beyond the contiguous zone in connection with activities under the Outer Continental Shelf Lands Act, activities under the Deepwater Port Act of 1974, or activities that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States, including resources under the Magnuson Fishery Conservation and Management Act of 1976.

(c) This subpart applies to the use of any chemical agents or other additives as defined in subpart A of this **part** that may be used to remove or control oil discharges.

Sec. 300.905 NCP Product Schedule.

(a) Oil Discharges. (1) EPA shall maintain a schedule of dispersants and other chemical or bioremediation products that may be authorized for use on oil discharges in accordance with the procedures set forth in Sec. 300.910. This schedule, called the NCP Product Schedule, may be obtained from the Emergency Response Division (5202-G), U.S. **Environmental Protection Agency**, 401 M Street, SW., Washington, DC 20460. The telephone number is 1-202-260-2342.

(2) Products may be added to the NCP Product Schedule by the process specified in Sec. 300.920.

(b) Hazardous Substance Releases. [Reserved]

Sec. 300.910 Authorization of use.

(a) RRTs and Area Committees shall address, as **part** of their planning activities, the desirability of using appropriate dispersants, surface washing agents, surface collecting agents, bioremediation agents, or miscellaneous oil spill control agents listed on the NCP Product Schedule, and the desirability of using appropriate burning agents. RCPs and ACPs shall, as appropriate, include applicable preauthorization plans and address the specific contexts in which such products should and should not be used. In meeting the provisions of this paragraph, preauthorization plans may address factors such as the potential sources and types of oil that might be spilled, the existence and location of environmentally sensitive resources that might be impacted by spilled oil, available product and storage locations, available equipment and adequately trained operators, and the available means to monitor product application and effectiveness. The RRT representatives from EPA and the states with jurisdiction over the waters of the area to which a preauthorization plan applies and the DOC and DOI natural resource trustees shall review and either approve, disapprove, or approve with modification the preauthorization plans developed by Area Committees, as appropriate. Approved preauthorization plans shall be included in the appropriate RCPs and ACPs. If the RRT representatives from EPA and the states with jurisdiction over the waters of the area to which a preauthorization plan applies and the DOC and DOI natural resource trustees approve in advance the use of certain products under specified circumstances as described in the preauthorization plan, the OSC may authorize the use of the products without obtaining the specific concurrences described in paragraphs (b) and (c) of this section.

(b) For spill situations that are not addressed by the preauthorization plans developed pursuant to paragraph (a) of this section, the OSC, with the concurrence of the EPA representative to the RRT and, as appropriate, the concurrence of the RRT representatives from the states with jurisdiction over the navigable waters threatened by the release or discharge, and in consultation with the DOC and DOI natural resource trustees, when practicable, may authorize the use of dispersants, surface washing agents, surface collecting agents, bioremediation agents, or miscellaneous oil spill control agents on the oil discharge, provided that the products are listed on the NCP Product Schedule.

(c) The OSC, with the concurrence of the EPA representative to the RRT and, as appropriate, the concurrence of the RRT representatives from the states with jurisdiction over the navigable waters threatened by the release or discharge, and in consultation with the DOC and DOI natural resource trustees, when practicable, may authorize the use of burning agents on a case-by-case basis.

(d) The OSC may authorize the use of any dispersant, surface washing agent, surface collecting agent, other chemical agent, burning agent, bioremediation agent, or miscellaneous oil spill control agent, including products not listed on the NCP Product Schedule, without obtaining the concurrence of the EPA representative to the RRT and, as appropriate, the RRT representatives from the states with jurisdiction over the navigable waters threatened by the release or discharge, when, in the judgment of the OSC, the use of the product is necessary to prevent or substantially reduce a hazard to human life. Whenever the OSC authorizes the use of a product pursuant to this paragraph, the OSC is to inform the EPA RRT representative and, as appropriate, the RRT

representatives from the affected states and, when practicable, the DOC/DOI natural resources trustees of the use of a product, including products not on the Schedule, as soon as possible. Once the threat to human life has subsided, the continued use of a product shall be in accordance with paragraphs (a), (b), and (c) of this section.

(e) Sinking agents shall not be authorized for application to oil discharges.

(f) When developing preauthorization plans, RRTs may require the performance of supplementary toxicity and effectiveness testing of products, in addition to the test methods specified in Sec. 300.915 and described in Appendix C to **part 300**, due to existing site-specific or area-specific concerns.

Sec. 300.915 Data requirements.

(a) Dispersants. (1) Name, brand, or trademark, if any, under which the dispersant is sold.

(2) Name, address, and telephone number of the manufacturer, importer, or vendor.

(3) Name, address, and telephone number of primary distributors or sales outlets.

(4) Special handling and worker precautions for storage and field application. Maximum and minimum storage temperatures, to include optimum ranges as well as temperatures that will cause phase separations, chemical changes, or other alterations to the effectiveness of the product.

(5) Shelf life.

(6) Recommended application procedures, concentrations, and conditions for use depending upon water salinity, water temperature, types and ages of the pollutants, and any other application restrictions.

(7) Effectiveness. Use the Swirling Flask effectiveness test methods described in Appendix C to **part 300**. Manufacturers shall submit test results and supporting data, along with a certification signed by responsible corporate officials of the manufacturer and laboratory stating that the test was conducted on a representative product sample, the testing was conducted using generally accepted laboratory practices, and they believe the results to be accurate. A dispersant must attain an effectiveness value of 45 percent or greater to be added to the NCP Product Schedule. Manufacturers are encouraged to provide data on product performance under conditions other than those captured by these tests.

(8) Dispersant Toxicity. For those dispersants that meet the effectiveness threshold described in paragraph (a)(7) above, use the standard toxicity test methods described in Appendix C to **part 300**. Manufacturers shall submit test results and supporting data, along with a certification signed by responsible corporate officials of the manufacturer and laboratory stating that the test was conducted on a representative product sample, the testing was conducted using generally accepted laboratory practices, and they believe the results to be accurate.

(9) The following data requirements incorporate by reference standards from the 1991 or 1992 Annual Books of ASTM Standards. American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pennsylvania 19103. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR **part 51**.\1\

\1\Copies of these standards may be obtained from the publisher. Copies may be inspected at the U.S. **Environmental Protection Agency**, 401 M St., SW., Room LG, Washington, DC, or at the Office of the Federal Register, 1100 L Street, NW., Room 8401, Washington, DC 20408.

- (i) Flash Point--Select appropriate method from the following:
 - (A) ASTM--D 56-87, ``Standard Test Method for Flash Point by Tag Closed Tester;''
 - (B) ASTM--D 92-90, ``Standard Test Method for Flash and Fire Points by Cleveland Open Cup;''
 - (C) ASTM--D 93-90, ``Standard Test Methods for Flash Point by Pensky-Martens Closed Tester;''
 - (D) ASTM--D 1310-86, ``Standard Test Method for Flash Point and Fire Point of Liquids by Tag Open-Cup Apparatus;'' or
 - (E) ASTM--D 3278-89, ``Standard Test Methods for Flash Point of Liquids by Setaflash Closed-Cup Apparatus.''
 - (ii) Pour Point--Use ASTM--D 97-87, ``Standard Test Method for Pour Point of Petroleum Oils.''
 - (iii) Viscosity--Use ASTM--D 445-88, ``Standard Test Method for Kinematic Viscosity of Transparent and Opaque Liquids (and the Calculation of Dynamic Viscosity).''
 - (iv) Specific Gravity--Use ASTM--D 1298-85(90), ``Standard Test Method for Density, Relative Density (Specific Gravity), or API Gravity of Crude Petroleum and Liquid Petroleum Products by Hydrometer Method.''
 - (v) pH--Use ASTM--D 1293-84(90), ``Standard Test Methods for pH of Water.''
 - (10) Dispersing Agent Components. Itemize by chemical name and percentage by weight each component of the total formulation. The percentages will include maximum, minimum, and average weights in order to reflect quality control variations in manufacture or formulation. In addition to the chemical information provided in response to the first two sentences, identify the major components in at least the following categories: surface active agents, solvents, and additives.
 - (11) Heavy Metals, Cyanide, and Chlorinated Hydrocarbons. Using standard test procedures, state the concentrations or upper limits of the following materials:
 - (i) Arsenic, cadmium, chromium, copper, lead, mercury, nickel, zinc, plus any other metals that may be reasonably expected to be in the sample. Atomic absorption methods should be used and the detailed analytical methods and sample preparation shall be fully described.
 - (ii) Cyanide. Standard calorimetric procedures should be used.
 - (iii) Chlorinated hydrocarbons. Gas chromatography should be used and the detailed analytical methods and sample preparation shall be fully described. At a minimum, the following test methods shall be used for chlorinated hydrocarbon analyses: EPA Method 601--Purgeable halocarbons (Standard Method 6230 B) and EPA Method 608--Organochlorine pesticides and PCBs (Standard Method 6630 C).\2\
-

\2\These test methods may be obtained from: Standard Methods for the Examination of Water and Wastewater, 17th Edition, American Public Health Association, 1989; or Method 601--Purgeable halocarbons, **40 CFR part 136** and Method 608--Organochlorine pesticide and PCBs, **40 CFR part 136**. Copies may be inspected at the U.S. **Environmental Protection Agency**, 401 M St., SW., Room LG,

Washington, DC, or at the Office of the Federal Register, 1100 L Street, NW., Room 8401, Washington, DC 20408.

(12) The technical product data submission shall include the identity of the laboratory that performed the required tests, the qualifications of the laboratory staff, including professional biographical information for individuals responsible for any tests, and laboratory experience with similar tests. Laboratories performing toxicity tests for dispersant toxicity must demonstrate previous toxicity test experience in order for their results to be accepted. It is the responsibility of the submitter to select competent analytical laboratories based on the guidelines contained herein. EPA reserves the right to refuse to accept a submission of technical product data because of lack of qualification of the analytical laboratory, significant variance between submitted data and any laboratory confirmation performed by EPA, or other circumstances that would result in inadequate or inaccurate information on the dispersing agent.

(b) Surface washing agents. (1) Name, brand, or trademark, if any, under which the surface washing agent is sold.

(2) Name, address, and telephone number of the manufacturer, importer, or vendor.

(3) Name, address, and telephone number of primary distributors or sales outlets.

(4) Special handling and worker precautions for storage and field application. Maximum and minimum storage temperatures, to include optimum ranges as well as temperatures that will cause phase separations, chemical changes, or other alterations to the effectiveness of the product.

(5) Shelf life.

(6) Recommended application procedures, concentrations, and conditions for use depending upon water salinity, water temperature, types and ages of the pollutants, and any other application restrictions.

(7) Toxicity. Use standard toxicity test methods described in Appendix C to **part 300**.

(8) Follow the data requirement specifications in paragraph (a)(9) of this section.

(9) Surface Washing Agent Components. Itemize by chemical name and percentage by weight each component of the total formulation. The percentages will include maximum, minimum, and average weights in order to reflect quality control variations in manufacture or formulation. In addition to the chemical information provided in response to the first two sentences, identify the major components in at least the following categories: surface active agents, solvents, and additives.

(10) Heavy Metals, Cyanide, and Chlorinated Hydrocarbons. Follow specifications in paragraph (a)(11) of this section.

(11) Analytical Laboratory Requirements for Technical Product Data. Follow specifications in paragraph (a)(12) of this section.

(c) Surface collecting agents. (1) Name, brand, or trademark, if any, under which the product is sold.

(2) Name, address, and telephone number of the manufacturer, importer, or vendor.

(3) Name, address, and telephone number of primary distributors or sales outlets.

(4) Special handling and worker precautions for storage and field application. Maximum and minimum storage temperatures, to include optimum ranges as well as temperatures that will cause phase separations, chemical changes, or other alterations to the

effectiveness of the product.

(5) Shelf life.

(6) Recommended application procedures, concentrations, and conditions for use depending upon water salinity, water temperature, types and ages of the pollutants, and any other application restrictions.

(7) Toxicity. Use standard toxicity test methods described in Appendix C to **part 300**.

(8) Follow the data requirement specifications in paragraph (a)(9) of this section.

(9) Test to Distinguish Between Surface Collecting Agents and Other Chemical Agents.

(i) Method Summary--Five milliliters of the chemical under test are mixed with 95 milliliters of distilled water and allowed to stand undisturbed for one hour. Then the volume of the upper phase is determined to the nearest one milliliter.

(ii) Apparatus.

(A) Mixing Cylinder: 100 milliliter subdivisions and fitted with a glass stopper.

(B) Pipettes: Volumetric pipette, 5.0 milliliter.

(C) Timers.

(iii) Procedure--Add 95 milliliters of distilled water at 22 deg. C, plus or minus 3 deg. C, to a 100 milliliter mixing cylinder. To the surface of the water in the mixing cylinder, add 5.0 milliliters of the chemical under test. Insert the stopper and invert the cylinder five times in ten seconds. Set upright for one hour at 22 deg. C, plus or minus 3 deg. C, and then measure the chemical layer at the surface of the water. If the major portion of the chemical added (75 percent) is at the water surface as a separate and easily distinguished layer, the product is a surface collecting agent.

(10) Surface Collecting Agent Components. Itemize by chemical name and percentage by weight each component of the total formulation. The percentages should include maximum, minimum, and average weights in order to reflect quality control variations in manufacture or formulation. In addition to the chemical information provided in response to the first two sentences, identify the major components in at least the following categories: surface action agents, solvents, and additives.

(11) Heavy Metals, Cyanide, and Chlorinated Hydrocarbons. Follow specifications in paragraph (a)(11) of this section.

(12) Analytical Laboratory Requirements for Technical Product Data. Follow specifications in paragraph (a)(12) of this section.

(d) Bioremediation Agents. (1) Name, brand, or trademark, if any, under which the agent is sold.

(2) Name, address, and telephone number of the manufacturer, importer, or vendor.

(3) Name, address, and telephone number of primary distributors or sales outlets.

(4) Special handling and worker precautions for storage and field application. Maximum and minimum storage temperatures.

(5) Shelf life.

(6) Recommended application procedures, concentrations, and conditions for use depending upon water salinity, water temperature, types and ages of the pollutants, and any other application restrictions.

(7) Bioremediation Agent Effectiveness. Use bioremediation agent effectiveness test methods described in Appendix C to **part 300**.

(8) Bioremediation Agent Toxicity [Reserved].

(9) Biological additives.

(i) For microbiological cultures, furnish the following information:

(A) Listing of each component of the total formulation, other than microorganisms, by chemical name and percentage by weight.

(B) Listing of all microorganisms by species.

(C) Percentage of each species in the composition of the additive.

(D) Optimum pH, temperature, and salinity ranges for use of the additive, and maximum and minimum pH, temperature, and salinity levels above or below which the effectiveness of the additive is reduced to half its optimum capacity.

(E) Special nutrient requirements, if any.

(F) Separate listing of the following, and test methods for such determinations: Salmonella, fecal coliform, Shigella, Staphylococcus Coagulase positive, and Beta Hemolytic Streptococci.

(ii) For enzyme additives, furnish the following information:

(A) Listing of each component of the total formulation, other than enzymes, by chemical name and percentage by weight.

(B) Enzyme name(s).

(C) International Union of Biochemistry (I.U.B.) number(s).

(D) Source of the enzyme.

(E) Units.

(F) Specific Activity.

(G) Optimum pH, temperature, and salinity ranges for use of the additive, and maximum and minimum pH, temperature, and salinity levels above or below which the effectiveness of the additive is reduced to half its optimum capacity.

(H) Enzyme shelf life.

(I) Enzyme optimum storage conditions.

(10) For nutrient additives, furnish the following information:

(i) Listing of each component of the total formulation by chemical name and percentage by weight.

(ii) Nutrient additive optimum storage conditions.

(11) Analytical Laboratory Requirements for Technical Product Data. Follow specifications in paragraph (a)(12) of this section.

(e) Burning Agents. EPA does not require technical product data submissions for burning agents and does not include burning agents on the NCP Product Schedule.

(f) Miscellaneous Oil Spill Control Agents. (1) Name, brand, or trademark, if any, under which the miscellaneous oil spill control agent is sold.

(2) Name, address, and telephone number of the manufacturer, importer, or vendor.

(3) Name, address, and telephone number of primary distributors or sales outlets.

(4) Brief description of recommended uses of the product and how the product works.

(5) Special handling and worker precautions for storage and field application. Maximum and minimum storage temperatures, to include optimum ranges as well as temperatures that will cause phase separations, chemical changes, or other alternatives to the effectiveness of the product.

(6) Shelf life.

(7) Recommended application procedures, concentrations, and conditions for use depending upon water salinity, water temperature, types and ages of the pollutants, and any other application restrictions.

(8) Toxicity. Use standard toxicity test methods described in Appendix C to **part 300**.

(9) Follow the data requirement specifications in paragraph (a)(9)

of this section.

(10) Miscellaneous Oil Spill Control Agent Components. Itemize by chemical name and percentage by weight each component of the total formulation. The percentages should include maximum, minimum, and average weights in order to reflect quality control variations in manufacture or formulation. In addition to the chemical information provided in response to the first two sentences, identify the major components in at least the following categories: surface active agents, solvents, and additives.

(11) Heavy Metals, Cyanide, and Chlorinated Hydrocarbons. Follow specifications in paragraph (a)(11) of this section.

(12) For any miscellaneous oil spill control agent that contains microbiological cultures, enzyme additives, or nutrient additives, furnish the information specified in paragraphs (d)(9) and (d)(10) of this section, as appropriate.

(13) Analytical Laboratory Requirements for Technical Product Data. Follow specifications in paragraph (a)(12) of this section.

(g) Sorbents. (1) Sorbent material may consist of, but is not limited to, the following materials:

(i) Organic products--

(A) Peat moss or straw;

(B) Cellulose fibers or cork;

(C) Corn cobs;

(D) Chicken, duck, or other bird feathers.

(ii) Mineral compounds--

(A) Volcanic ash or perlite;

(B) Vermiculite or zeolite.

(iii) Synthetic products--

(A) Polypropylene;

(B) Polyethylene;

(C) Polyurethane;

(D) Polyester.

(2) EPA does not require technical product data submissions for sorbents and does not include sorbents on the NCP Product Schedule.

(3) Manufacturers that produce sorbent materials that consist of materials other than those listed in paragraph (g)(1) of this section shall submit to EPA the technical product data specified for miscellaneous oil spill control agents in paragraph (f) of this section and EPA will consider listing those products on the NCP Product Schedule under the miscellaneous oil spill control agent category. EPA will inform the submitter in writing, within 60 days of the receipt of technical product data, of its decision on adding the product to the Schedule.

(4) Certification. OSCs may request a written certification from manufacturers that produce sorbent materials that consist solely of the materials listed in paragraph (g)(1) of this section prior to making a decision on the use of a particular sorbent material. The certification at a minimum shall state that the sorbent consists solely of the materials listed in Sec. 300.915(g)(1) of the NCP. The following statement, when completed, dated, and signed by a sorbent manufacturer, is sufficient to meet the written certification requirement:

[SORBENT NAME] is a sorbent material and consists solely of the materials listed in Sec. 300.915(g)(1) of the NCP.

(h) Mixed products. Manufacturers of products that consist of materials that meet the definitions of two or more of the product categories contained on the NCP Product Schedule shall submit to EPA the technical product data specified in this section for each of those

product categories. After review of the submitted technical product data, and the performance of required dispersant effectiveness and toxicity tests, if appropriate, EPA will make a determination on whether and under which category the mixed product should be listed on the Schedule.

Sec. 300.920 Addition of products to Schedule.

(a) Dispersants. (1) To add a dispersant to the NCP Product Schedule, submit the technical product data specified in Sec. 300.915(a) to the Emergency Response Division (5202-G), U.S. **Environmental Protection Agency**, 401 M Street, SW, Washington, DC 20460. A dispersant must attain an effectiveness value of 45 percent or greater in order to be added to the Schedule.

(2) EPA reserves the right to request further documentation of the manufacturers' test results. EPA also reserves the right to verify test results and consider the results of EPA's verification testing in determining whether the dispersant meets listing criteria. EPA will, within 60 days of receiving a complete application as specified in Sec. 300.915(a) of this **part**, notify the manufacturer of its decision to list the product on the Schedule, or request additional information and/or a sample of the product in order to review and/or conduct validation sampling. If EPA requests additional information and/or a product sample, within 60 days of receiving such additional information or sample, EPA will then notify the manufacturer in writing of its decision to list or not list the product.

(3) Request for review of decision. (i) A manufacturer whose product was determined to be ineligible for listing on the NCP Product Schedule may request EPA's Administrator to review the determination. The request must be made in writing within 30 days of receiving notification of EPA's decision to not list the dispersant on the Schedule. The request shall contain a clear and concise statement with supporting facts and technical analysis demonstrating that EPA's decision was incorrect.

(ii) The Administrator or his designee may request additional information from the manufacturer, or from any other person, and may provide for a conference between EPA and the manufacturer, if appropriate. The Administrator or his designee shall render a decision within 60 days of receiving the request, or within 60 days of receiving requested additional information, if appropriate, and shall notify the manufacturer of his decision in writing.

(b) Surface washing agents, surface collecting agents, bioremediation agents, and miscellaneous oil spill control agents. (1) To add a surface washing agent, surface collecting agent, bioremediation agent, or miscellaneous oil spill control agent to the NCP Product Schedule, the technical product data specified in Sec. 300.915 must be submitted to the Emergency Response Division (5202-G), U.S. **Environmental Protection Agency**, 401 M Street, SW., Washington, DC 20460. If EPA determines that the required data were submitted, EPA will add the product to the Schedule.

(2) EPA will inform the submitter in writing, within 60 days of the receipt of technical product data, of its decision on adding the product to the Schedule.

(c) The submitter may assert that certain information in the technical product data submissions, including technical product data submissions for sorbents pursuant to Sec. 300.915(g)(3), is confidential business information. EPA will handle such claims pursuant to the provisions in **40 CFR part 2**, subpart B. Such information must be

submitted separately from non-confidential information, clearly identified, and clearly marked ``Confidential Business Information.'' If the submitter fails to make such a claim at the time of submittal, EPA may make the information available to the public without further notice.

(d) The submitter must notify EPA of any changes in the composition, formulation, or application of the dispersant, surface washing agent, surface collecting agent, bioremediation agent, or miscellaneous oil spill control agent. On the basis of this data, EPA may require retesting of the product if the change is likely to affect the effectiveness or toxicity of the product.

(e) The listing of a product on the NCP Product Schedule does not constitute approval of the product. To avoid possible misinterpretation or misrepresentation, any label, advertisement, or technical literature that refers to the placement of the product on the NCP Product Schedule must either reproduce in its entirety EPA's written statement that it will add the product to the NCP Product Schedule under Sec.

300.920(a)(2) or **(b)(2)**, or include the disclaimer shown below. If the disclaimer is used, it must be conspicuous and must be fully reproduced. Failure to comply with these restrictions or any other improper attempt to demonstrate the approval of the product by any NRT or other U.S. Government **agency** shall constitute grounds for removing the product from the NCP Product Schedule.

DISCLAIMER

[PRODUCT NAME] is on the U.S. **Environmental Protection Agency's** NCP Product Schedule. This listing does NOT mean that EPA approves, recommends, licenses, certifies, or authorizes the use of [PRODUCT NAME] on an oil discharge. This listing means only that data have been submitted to EPA as required by subpart J of the National Contingency Plan, Sec. **300.915**.

12. Appendix C to **part 300** is revised to read as follows:

Appendix C to **Part 300**--Swirling Flask Dispersant Effectiveness Test, Revised Standard Dispersant Toxicity Test, and Bioremediation Agent Effectiveness Test

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1.0 Introduction

1.1 Scope and Application. The methods described below apply to ``dispersants, surface washing agents, surface collecting agents, bioremediation agents, and miscellaneous oil spill control agents'' involving subpart J (Use of Dispersants and Other Chemicals) in **40 CFR Part 300** (National Oil and Hazardous Substances Pollution Contingency Plan). They are revisions and additions to the EPA's Standard Dispersant Effectiveness and Toxicity Tests (1). The new Swirling Flask Dispersant Effectiveness Test is used only for testing dispersants. The Revised Standard Dispersant Toxicity Test is used for testing dispersants, as well as surface washing agents, surface collecting agents, and miscellaneous oil spill control agents. The bioremediation agent effectiveness test is used for testing bioremediation agents only.

1.2 Definitions. The definitions of dispersants, surface washing agents, surface collecting agents, bioremediation agents, and miscellaneous oil spill control agents are provided in **40 CFR 300.5**.

2.0 Swirling Flask Dispersant Effectiveness Test

2.1 Summary of Method. This protocol was developed by Environment Canada to provide a relatively rapid and simple testing procedure for evaluating dispersant effectiveness (2). It uses a modified Erlenmeyer flask to which a side spout has been added for removing subsurface samples of water near the bottom of the flask without disturbing a surface oil layer. Seawater and a surface layer of oil are added to the flask. Turbulent mixing is provided by placing the flask on a standard shaker table at 150 rpm for 20 minutes to induce a swirling motion to the liquid contents. Following shaking, the flask is immediately removed from the shaker table and maintained in a stationary position for 10 minutes to allow the oil that will reform a slick to return to the water's surface. A sample of water for chemical analysis is then removed from the bottom of the flask through the side spout, extracted with methylene chloride (dichloromethane-DCM), and analyzed for oil content by UV-visible absorption spectrophotometry at wavelengths of 340, 370, and 400 nm (2).

2.2 Apparatus.

2.2.1 Modified Erlenmeyer Flask. Use 125-ml glass Erlenmeyer flasks that have been modified to include an attachment of a glass side

spout that extends from the bottom of the flask upward to the neck region, as shown in Figure 1.

2.2.2 Shaker Table. Use a shaker table with speed control unit with variable speed (40-400 rpm) and an orbital diameter of approximately 0.75 inches (2 cm) to provide turbulence to solutions in test flasks.

2.2.3 Spectrophotometer. Use a UV-visible spectrophotometer capable of measuring absorbance at 340, 370, and 400 nm. A Hitachi Model U-2000 or equivalent is acceptable for this purpose.

2.2.4 Glassware. Glassware should consist of 5-, 10-, 25-, 100-, and 500-ml graduated cylinders; 125-ml separatory funnels with Teflon stopcocks; and 10-, 100-, and 1,000-ml volumetric flasks and micropipettes.

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2.3 Reagents. 2.3.1 Synthetic seawater. The synthetic sea salt ``Instant Ocean,' ' manufactured by Aquarium Systems of Mentor, OH, can be used for this purpose. The synthetic seawater solution is prepared by dissolving 34 g of the salt mixture in 1 liter of distilled water (i.e., a salinity of 34 ppt). Table 1 provides a list of the ion composition of the seasalt mixture.

Table 1.--Major Ion Composition of ``Instant Ocean' ' Synthetic Sea Salt

Major Ion	% Total Weight	Ionic Concentration at 34 ppt salinity (mg/1)
Chloride (Cl ⁻).....	47.470	
18,740		
Sodium (Na ⁺).....	26.280	
10,454		
Sulfate (SO ₄ ⁻).....	6.602	
2,631		
Magnesium (Mg ⁺⁺).....	3.230	
1,256		
Calcium (Ca ⁺⁺).....	1.013	
400		
Potassium (K ⁺).....	1.015	
401		
Bicarbonate (HCO ₃ ⁻).....	0.491	
194		
Boron (B).....	0.015	6.0
Strontium (Sr ⁺⁺).....	0.001	
7.5		
SOLIDS TOTAL.....	86.11%	34,089.50
Water.....	13.88	
TOTAL.....	99.99%	

Following the preparation, the saltwater solution is allowed to equilibrate to the ambient temperature of the laboratory and should

be in the range of 22 \pm 3 deg.C.

2.3.2 Test oil. Two EPA/American Petroleum Institute (API) standard reference oils, Prudhoe Bay and South Louisiana crude, should be used for this test. These oils can be obtained from the Resource Technology Corporation, 2931 Soldier Springs Road, P.O. Box 1346, Laramie, WY 82070, (307) 742-5452. These oils have been thoroughly homogenized, as well as characterized physically and chemically for previous EPA and API studies. Various selected parameters are presented in Table 2.

Table 2.--Test Oil Characteristics

	Prudhoe Bay crude oil	South Louisiana crude oil
Specific gravity\1\.....	0.894 kg/1.....	0.840 kg/1
API gravity\1\.....	26.8 degrees....	37.0 degrees
Sulfur.....	1.03 wt%.....	0.23 wt%
Sulfur compounds, profile.....	.....	.....
Nitrogen.....	0.20 wt%.....	0.031 wt%
Vanadium.....	21 mg/1.....	0.95 mg/1
Nickel.....	11 mg/1.....	1.1 mg/1
Simulated distillation profile.....	.....	.....
Infrared spectrum.....	.....	.....
UV fluorescence spectrum.....	.....	.....
Pour Point.....	+25 deg.F.....	0 deg.F
Viscosity		
at 40 deg.C.....	14.09 cST.....	3.582 cST
at 100 deg.C.....	4.059 cST.....	1.568 cST
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\1\At 15 deg.C

\2\ANot calculable when viscosity at 100 deg.C is less than 2.0.

2.3.3 Methylene Chloride (Dichloromethane-DCM), pesticide quality. For extraction of all sample water and oil-standard water samples.

2.4 Pretest preparation. 2.4.1 Preparation and analysis of oil standards. 2.4.1.1 Standard solutions of oil for calibrating the UV-visible spectrophotometer are prepared with the specific reference oils and dispersant used for a particular set of experimental test runs. For experiments with no dispersant, only oil is used to make the standard solution. For experiments with the oil plus dispersant, the standard is made with a 1:10 (v:v) mixture of the dispersant to the test oil (i.e., a dispersant-to-oil ratio of 1:10). This ratio is used in the test tank with dispersant added. The presence of water and certain dispersants in DCM extracts can affect absorbance readings in a spectrophotometer. All standard solutions of oil (and dispersant, if present) should be prepared in a stepwise manner that reflects the analytical protocol used for the experimental water samples.

2.4.1.2 To prepare the standards, prepare a parent oil-DCM standard by mixing 1 **part** oil (plus 1/10 **part** premixed dispersant, if applicable) to 9 parts DCM (i.e., 1:10 dilution of the oil v:v). Add a specific volume of the parent oil-DCM standard to 30 ml of synthetic seawater in a separatory funnel. Extract the oil-water mixture with 5-ml volumes of DCM after 15 seconds of vigorous shaking followed by a 2 minute stationary period to allow for phase

separation for each extraction. Repeat the extraction using a total of three 5-ml portions of DCM. Adjust the final DCM volume for the combined extracts to 20 ml with DCM in a 25-ml graduated cylinder.

2.4.1.3 The quantities of oil used to achieve the desired concentrations in the final 20-ml DCM extracts for the standard oil-solutions are summarized in Table 3. Specific masses for oil amounts in standards are determined as volumes of oil multiplied by the density of the oil.

2.4.2 Linear stability calibration of UV-Visible spectrophotometer.

2.4.2.1 Before DCM-extracts of dispersed oil-water samples can be analyzed for their oil content, the UV-visible spectrophotometer must meet an instrument stability calibration criterion. This criterion is determined with the six oil standards identified in Table 3. Determine the absorbance of standards at each of the three analytical wavelengths (i.e., 340, 370, and 400 nm). Determine the response factors (RFs) for the test oil at each of the three analytical wavelengths using the following equation:

$$RF_x = C/A_x \quad (1)$$

where:

RF_x = Response factor at wavelength x (x=340, 370, or 400 nm)

C = Oil concentration, in mg of oil/ml of DCM in standard solution

A_x = Spectrophotometric absorbance of wavelength x

Table 3--Oil Standard Solutions: Concentrations in Final DCM Extractions\1\

Final oil concentration (mg/ml of DCM)	Final extract volume (ml of DCM)	Total amount of oil in standard (mg)	Volume of parent oil-DCM std (<greek-m>1) added to saltwater
4.0.....	20.0	80.0	890
2.0.....	20.0	40.0	440
1.0.....	20.0	20.0	220
0.50.....	20.0	10.0	110
0.10.....	20.0	2.0	22
0.05.....	20.0	1.0	11

\1\ Assuming an oil density of 0.9 g/ml and an extraction efficiency of 100% for oil from the 30-ml of seawater.

2.4.2.2 Instrument stability for the initial calibration is acceptable when the RFs for the five highest standard extracts of oil are <20% different from the overall mean value for the five standards. If this criterion is satisfied, analysis of sample extracts can begin. RFs for the lowest concentration (0.05 mg oil/ml DCM) are not included in the consideration because the absorbance is close to the detection limit of the spectrophotometer (with associated high variability in the value) for the 1-cm path-length cell used for measurements. Absorbances <gr-thn-eq>3.5 are not included because absorbance saturation occurs at and above this value.

2.4.2.3 If one or more of the standard oil extracts do not meet this linear-stability criterion, then the ``offending'' standard(s)

can be prepared a second time (i.e., extraction of the specified amount of oil from 30-ml or seawater for the ``offending'' standard according to the pretest preparation procedure). If replacement of the reanalyzed standard solution(s) in the standard curve meets the linear-stability criterion (i.e., no RF >20% different from the overall mean), then analysis of sample extracts can begin.

2.4.2.4 If the initial-stability criterion is still not satisfied, analysis of sample extract cannot begin and the source of the problem (e.g., preparation protocol for the oil standards, spectrophotometer stability, etc.) must be corrected.

2.4.2.5 The initial six-point calibration of the UV-visible spectrophotometer at the oil concentrations identified is required at least once per test day.

2.5 Test procedure. 2.5.1 Preparation of premixed dispersant oil. Prepare a premixed dispersant oil by mixing 1 **part** dispersant to 10 parts oil. Store this mixture in a glass container. The dispersant effectiveness test procedures are listed in steps 1-20:

1. Prepare 4 replicates (same test oil and dispersant), one control (i.e., no dispersant), and one method blank and run at the same time on the shaker table.

2. Add 120 \pm 2 ml of synthetic seawater to each of the modified 125-ml glass Erlenmeyer flasks. Measure and record the water temperature.

3. Place the flasks securely into the attached slot on the shaker table.

4. Carefully add 100 μ l of an oil-dispersant solution onto the center of the water's surface using a positive displacement pipette.

5. Agitate the flasks for 20 \pm 1 minutes at 150 \pm 10 rpm on the shaker table.

6. After the 20 \pm 1 minutes shaking, remove the flasks from the shaker table and allow them to remain stationary for 10 \pm 1 minutes for oil droplet ``settling.''

7. At the conclusion of the 10-minute settling period, carefully decant a 30-ml sample through the side spout of the test flasks into a 50-ml graduated cylinder.

Note: Discard the first 1-2 ml of sample water to remove nonhomogeneous water-oil initially contained in the spout.

8. Transfer the samples from the graduated cylinder into a 125- or 250-ml glass separatory funnel fitted with a Teflon stopcock.

9. Add 5 ml of pesticide-quality DCM to the separatory funnel and shake vigorously for 15 seconds. Release the pressure carefully from the separatory funnel through the stopcock into a fume hood.

10. Allow the funnel to remain in a stationary position for 2 minutes to allow phase-separation of the water and DCM.

11. Drain the DCM layer from the separatory funnel into a glass-stoppered, 25-ml graduated glass cylinder.

12. Repeat the DCM-extraction process two additional times.

13. Combine the three extracts in the graduated cylinder and adjust the final volume to 20-ml with additional DCM.

14. Analyze the samples using a UV-spectrophotometer at 340, 370, and 400 nm-wavelengths and determine the quantity of oil as follows:

$$C_{INF} = (A_{INF} \times (RF_{INF} \times (V_{INF}^{DCM} \times (V_{INF}^{tw} / V_{INF}^{ew})))$$

(2)

where:

C_{x} = Total mass of dispersed oil in swirling flask at wavelength x ($x=340, 370, \text{ or } 400 \text{ nm}$)

A_x = Spectrophotometric absorbance at wavelength x

RF_x = Mean response factor at wavelength x (determined from equation 1)

V_{DCM} = Final volume of DCM-extract of water sample (20 ml)

V_{tw} = Total water volume in swirling flask vessel (120 ml)

V_{ew} = Volume of water extracted for dispersed oil content (30 ml)

15. Obtain three concentration values for oil in each experimental water sample (340, 370, and 400 nm).

16. Determine the mean of three values as follows:

$$C_{mean} = (C_{340} + C_{370} + C_{400}) / 3 \quad (3)$$

Note: Means will be used for all dispersion-performance calculations. Samples where one of the values for C_{340} , C_{370} , or C_{400} is more than 30% different from C_{mean} will be flagged. Whenever oil measurements are flagged as having a concentration based on one wavelength as >30% different from C_{mean} , raw data will be evaluated to establish that the measurements are valid. In addition, attempts will be made to correlate the difference to oil type, dispersant test, or dispersant used. If no errors or correlations are apparent and >10% of all oil measurements are flagged, the mean concentration data will be used in the calculation for dispersant performance and the subject data will be flagged.

17. Determine the dispersant performance (i.e., percent of oil that is dispersed, or EFF) based on the ratio of oil dispersed in the test system to the total oil added to the system as follows:

$$EFF \text{ (in \%)} = (C_{mean} / C_{TOT}) \times 100 \quad (4)$$

where:

C_{mean} = Mean value for total mass of dispersed oil in the swirling flask determined by spectrophotometric analysis

C_{TOT} = Total mass of oil initially added to the experimental swirling flask

18. Calculate EFF using equation 4 for coupled experiments with and without dispersant (EFF_c and EFF_d , respectively). EFF_c is the effectiveness of the control and represents natural dispersion of the oil in the test apparatus. EFF_d is the measured uncorrected value.

19. Calculate the final dispersant performance of a chemical dispersant agent after correcting for natural dispersion using equation 5.

$$EFF_D = EFF_d - EFF_c \quad (5)$$

where:

EFF_D = % dispersed oil due to dispersant only

EFF_d = % dispersed oil with dispersant added

EFF_c = % dispersed oil with no dispersant added

20. Calculate the average dispersant effectiveness value by summing the corrected values (EFF_D) for each of the four replicates for each of the two test oils and dividing this sum by eight.

2.6 Performance criterion. The dispersant product tested will remain in consideration for addition to the NCP Product Schedule if the average dispersant effectiveness, as calculated in section 2.5 above, is at least 45% (i.e., $50\% \pm 5\%$).

2.7 Quality Control (QC) procedures for measurements of oil

concentrations. 2.7.1 UV-visible spectrophotometric measurements. At least 5% of all UV-visible spectrophotometric measurements will be performed in duplicate as a QC check on the analytical measurement method. The absorbance values for the duplicates should agree within $\pm 5\%$ of their mean value.

2.7.2 Method blanks. Analytical method blanks involve an analysis of seawater blanks (i.e., seawater but no oil or dispersant in a swirling flask vessel) through testing and analytical procedures (3, pp 79-80). Method blanks are analyzed with a frequency of at least 1 for every 12 experimental swirling flask samples. Oil concentrations in method blanks must be $<5\%$ of that occurring for 100% dispersion of oil in testing apparatus.

3.0 Revised standard dispersant toxicity test

3.1 Summary of method. The standard toxicity test for dispersants and other products involves exposing two species (*Menidia beryllina* (silversides) and *Mysidopsis bahia* (mysid shrimp)) to five concentrations of the test product and No. 2 fuel oil alone and in a 1:10 mixture of product to oil. To aid in comparing results from assays performed by different workers, reference toxicity tests are conducted using dodecyl sodium sulfate (DSS) as a reference toxicant. The test length is 96 hours for *Menidia* and 48 hours for *Mysidopsis*. LC_{50} s are calculated based on mortality data at the end of the exposure period (for method of calculation, see section 3.6 below).

3.2 Selection and preparation of test materials.

3.2.1 Test organisms.

3.2.1.1 *Menidia beryllina*. Obtain fish (silversides) from a single source for each series of toxicity tests. In-house cultures are recommended wherever it is cost-effective; however, organisms are available from commercial suppliers. Information on the source of test organisms and any known unusual condition to which fish were exposed before use should be included in the data report. Use of animals previously treated with pesticides or chemotherapeutic agents should be avoided. Organisms should not be used if they appear to be unhealthy, discolored, or show signs of stress. Use 7-day old larval fish. Fish should be cultured in accordance with the methods outlined in Middaugh, et al. (5). There should be no need to acclimate organisms to the ± 1 deg.C temperature recommended for the toxicity tests if laboratory stock cultures of *Menidia* are maintained at the recommended culture temperature of ± 1 deg.C. If test organisms must be obtained from a commercial source, it may become necessary to acclimate test fish to the test temperature of ± 1 deg.C, a pH of 8.0 ± 0.2 , and 20 ± 2 ppt salinity since changes in temperature may occur during shipping. Eliminate groups of fish having a mortality of more than 10% during the first 48 hours, and more than 5% thereafter. During acclimation, organisms should be maintained on a diet of freshly hatched *Artemia* (brine shrimp) nauplii. Feed the fish daily to satiation during the acclimation period, and once daily during the 96-hour test. Care should be taken daily to remove excess food and fecal material from beakers during the test. Use only those organisms that feed actively and that appear to be healthy. Organisms should be free of disease, external parasites, and any signs of physical damage or stress. Discard any fish injured or dropped while handling.

3.2.1.2 *Mysidopsis bahia*. Several methods for culturing *Mysidopsis bahia* (mysid shrimp) may be used and are noted in Appendix A of Methods for Measuring the Acute Toxicity of Effluents

and Receiving Waters to Freshwater and Marine Organisms (6). To ensure uniformity of mysids, recently hatched mysids should be collected daily from stock cultures and identified by the date of hatch. Mysids used in 48-hour tests should be from a single day's collection, but may have an age range of 5-7 days old. In cases where in-house cultures of mysids are unavailable, organisms may be purchased from a commercial source. Information on the source of test organisms should be submitted in the data report.

3.2.2 Preparation of experimental water. Filtered natural seawater is recommended for use since it represents a natural source of saltwater containing an inherent population of microorganisms. Synthetic seawater formulated according to the following method can serve as an acceptable alternative to filtered, natural seawater for toxicity tests performed in laboratories in which natural seawater is unavailable.

3.2.3 Synthetic seawater formation. To prepare standard seawater, mix technical-grade salts with 900 liters of distilled or demineralized water in the order and quantities listed in Table 4. These ingredients must be added in the order listed and each ingredient must be dissolved before another is added. Stir constantly after each addition during preparation until dissolution is complete. Add distilled or demineralized water to make up to 1,000 liters. The pH should now be 8.0 ± 0.2 . To attain the desired salinity of 20 ± 1 ppt, dilute again with distilled or demineralized water at time of use.

3.3 Sampling and storage of test materials. Toxicity tests are performed with No. 2 fuel oil having the characteristics defined in Table 5. Store oil used for toxicity tests in sealed containers to prevent the loss of volatiles and other changes. For ease in handling and use, it is recommended that 1,000-ml glass containers be used. To ensure comparable results in the bioassay tests, use oils packaged and sealed at the source. Dispose of unused oil in each open container on completion of dosing to prevent its use at a later date when it may have lost some of its volatile components. Run all tests in a bioassay series with oil from the same container and with organisms from the same group collected or secured from the same source.

Table 4.--Synthetic Seawater
[Toxicity Test]

Salt	(g)\1\
NaF.....	1.9
SrCl ₂ • 6H ₂ O.....	13.0
H ₂ BO ₃	20.0
KBr.....	67.0
KCl.....	466.0
CaCl ₂ • 2H ₂ O.....	

733.0
Na<INF>2SO<INF>4.....
2,660.0
MgCl<INF>2 <bullet> 6H<INF>2O.....
3,330.0
NaCl..... 15,650.0
Na<INF>2SiO<INF>3 <bullet>
9H<INF>2O..... 13.0
EDTA<SUP>2.....
0.4
NaHCO<INF>3.....
133.0

\1\Amount added to 900 liters of water, as described in the text.
\2\Ethylenediaminetetraacetate tetrasodium salt.

3.4 General test conditions and procedures for toxicity tests.
3.4.1 Temperature. For these toxicity tests, use test solutions with temperatures of 25<plus-minus>1 deg.C.
3.4.2 Dissolved oxygen and aeration.
3.4.2.1 Menidia. Because oils contain toxic, volatile materials, and because the toxicity of some water-soluble fractions of oil and degradation products are changed by oxidation, special care must be used in the oxygenation of test solutions. Aeration during the test is generally not recommended but should be used to maintain the required dissolved oxygen (DO) in cases where low DO is observed. The DO content of test solutions must not drop below 60% saturation during the first 48 hours of a static acute (96-hour) test and must remain between 40-100% after the first 48 hours of the test. Aeration at a rate of 100<plus-minus>15 bubbles per minute is supplied by a serological pipette as needed for maintenance of DO. If aeration is necessary, all test chambers should be aerated. At this rate, and with the proper weight of fish, DO concentration should remain slightly above 4 ppm over a 96-hour period. Take DO measurements daily.

Table 5.--Test Oil Characteristics: No. 2 Fuel Oil

Characteristic	Minimum	Maximum
Gravity (deg.API).....	32.1	42.8
Viscosity kinematic at 100 deg.F (cs).....	2.35	3.00
Flash point (deg.F).....	150	...
Pour point (deg.F).....	...	0
Cloud point (deg.F).....	...	10
Sulfur (wt %).....	...	0.35
Aniline point (deg.F).....	125	180
Carbon residue (wt %).....	...	0.16
Water (vol %).....	...	0
Sediment (wt %).....	...	0
Aromatics (vol %).....	10	15
Distillation:		
IBP (deg.F).....	347	407
10% (deg.F).....	402	456
50% (deg.F).....	475	530
90% (deg.F).....	542	606
End Point (deg.F).....	596	655
Neutralization No.....	...	0.05

3.4.2.2 Mysidopsis. Achieve sufficient DO by ensuring that the surface area to volume ratio of the test solution exposed is large enough. Oxygen content should remain high throughout the test because of the low oxygen demand of the organisms. Aeration is not recommended during 48-hour acute toxicity tests unless the DO falls below 60% saturation.

3.4.3 Controls. With each fish or mysid test or each series of simultaneous tests of different solutions, perform a concurrent control test in exactly the same manner as the other tests and under the conditions prescribed or selected for those tests. Use the diluent water alone as the medium in which the controls are held. There must be no more than 10% mortality among the controls during the course of any valid test.

3.4.4 Reference toxicant. To aid in comparing results from tests performed by different workers and to detect changes in the condition of the test organisms that might lead to different results, perform reference toxicity tests with reagent grade DSS in addition to the usual control tests. Prepare a stock solution of DSS immediately before use by adding 1 gram of DSS per 500 ml of test water solution. Use exploratory tests before the full scale tests are begun to determine the amount of reference standard to be used in each of the five different concentrations.

3.4.5 Number of organisms. At a minimum, 20 organisms of a given species are exposed for each test concentration. For the toxicity test procedures using Menidia, place 10 fish in each of two jars. For the toxicity tests using Mysidopsis, place 10 larvae in each of two containers.

3.4.6 Transfer of organisms. Organisms should be handled as little as possible in order to minimize stress. Transfer Menidia and Mysidopsis from the acclimatization aquaria to the test chambers with a pipette or a wide-bore, smooth glass tube (4 to 8 mm internal diameter) fitted with a rubber bulb. Dip nets should be avoided when handling larval fish and mysids. Do not hold fish out of the water longer than necessary and discard any specimen accidentally dropped or otherwise mishandled during transfer.

3.4.6.1 Mysidopsis. To have the mysids ready for study, mysids may be sorted 24 hours prior to initiation of the 48-hour test. Transfer the mysids to a beaker containing a small volume of water; this vessel serves as a holding chamber during randomized transfer of the organisms to test solutions. Mysids are randomly selected from the batch of mysids in the holding chamber, and transferred to 50-ml beakers containing a small volume of seawater. One mysid is added per beaker using a small piece of flexible 500- μ m screening until all of the beakers contain one mysid. The process of random selection and sorting is continued until the appropriate number of mysids has been delivered to each of the 50-ml beakers. The mysids are gently released from the 50-ml beakers into larger beakers filled with an appropriate volume of 20-ppt seawater (25 deg.C) to bring the total volume to 200 ml. The beakers are randomly placed into a temperature-controlled water bath to acclimate overnight at 25 deg.C. The mysids are transferred to larger beakers (1-liter) for the 48-hour test after the addition of 800 ml of the test solution. A total of 10 mysids per beaker are used for 48-hour acute toxicity tests. A minimum of two replicate chambers are used for each test concentration and control.

3.4.6.2 Menidia and Mysidopsis are fed 50 brine shrimp nauplii/organism daily during the 96-hour and 48-hour tests. Excess food should be removed daily by aspirating with a pipette.

3.4.7 Test duration and observations. 3.4.7.1 Menidia. Observe

the number of dead fish in each test container and record at the end of each 24-hour period. Fish are considered dead upon cessation of respiratory and all other overt movements, whether spontaneous or in response to mild mechanical prodding. Remove dead fish as soon as observed. Also note and report when the behavior of test fish deviates from that of control fish. Such behavioral changes would include variations in opercular movement, coloration, body orientation, movement, depth in container, schooling tendencies, and others. Abnormal behavior of the test organisms (especially during the first 24 hours) is a desirable parameter to monitor in a toxicity test because changes in behavior and appearance may precede mortality. Toxicants can reduce an organism's ability to survive natural stresses. In these cases, the mortality is not directly attributed to the toxicant, but most certainly is an indirect effect. Reports on behavioral changes during a toxicity test can give insight into the non-acute effects of the tested material. At the end of the 96-hour period, terminate the fish tests and determine the LC₅₀ values. The acute toxicity test is terminated after four days of exposure. The number of surviving fish are counted and recorded for each chamber in accordance with standard EPA methods (6). The LC₅₀ is calculated using survival data from the test in accordance with the methods described in the guidelines (6).

3.4.7.2 Mysidopsis. Terminate the mysid test after 48 hours of incubation. To count the dead animals accurately, place the exposure vessels on a light table such that light passes through the bottom of the vessel. Most of the dead mysids will be on the bottom of the beaker and can readily be seen against the background of the light table. Also search the top of the liquid for mysids trapped there by surface tension. Exercise caution when determining death of the animals. Occasionally, an animal appears dead, but closer observation shows slight movement of an appendage or a periodic spasm of its entire body. For these tests, animals exhibiting any movement when touched with a pipette tip are considered alive. Account for all test animals to ensure accuracy since Mysidopsis bahia may disintegrate or be cannibalized by other mysids. Consider individuals not accounted for as dead. At the end of 48 hours of exposure, terminate the mysid assay and determine the LC₅₀ values in accordance with the methods described in the guidelines (6).

3.4.8 Physical and chemical determinations. 3.4.8.1 Menidia. Determine the temperature, DO, and pH of the test solutions before the fish are added and at 24-, 48-, 72-, and 96-hour exposure intervals. It is necessary to take measurements from only one of the replicates of each of the toxicant series.

3.4.8.2 Mysidopsis. Determine the temperature, DO, and pH of the test solutions before the nauplii are added and at the 24- and 48-hour exposure interval. Measure DO and pH in only one of the replicates of each of the toxicant series.

3.4.9 Testing laboratory. An ordinary heated or air-conditioned laboratory room with thermostatic controls suitable for maintaining the prescribed test temperatures generally will suffice to conduct the toxicity tests. Where ambient temperatures cannot be controlled to ± 1 deg.C, use water baths with the necessary temperature controls.

3.4.10 Test containers. For tests with fish or mysids, use 1-liter glass beakers measuring approximately 10 cm in diameter. In conducting the test, add to each beaker 1 liter of the test solution or seawater formulation aerated to saturation with DO. To add the liter volume easily and accurately, use a large volume (1-liter)

graduated cylinder. Process all required glassware before each test. Immerse in normal hexane for 10 minutes. Follow this with a thorough rinse with hot tap water; three hot detergent scrubs; an additional hot tap-water rinse; and three rinses with distilled water. Oven or air dry the glassware in a reasonably dust-free atmosphere.

3.5 Preparation of test concentrations. 3.5.1 Menidia. Place test jars (approximately 22.5 cm in height, 15 cm in diameter, 11 cm in diameter at the mouth) containing 2 liters of synthetic seawater on a reciprocal shaker. The shaker platform should be adapted to hold firmly six of the toxicity test jars. Add the desired amount of the petroleum product (if applicable) under test directly to each test jar. Dispense the appropriate amount of toxicant (if applicable) into the jars with a pipette. Tightly cap the test jars and shake for 5 minutes at approximately 315 to 333 2-cm (0.75-inch) strokes per minute in a reciprocal shaker or at approximately 150 to 160 rpm on orbital shakers. At the completion of shaking, remove the jars from the shaker and dispense 1 liter of the mixture to each of the 1-liter glass beakers. Randomly place beakers in a constant-temperature water bath or room, take water quality measurements, add fish, and initiate aeration.

3.5.2 Mysidopsis. 3.5.2.1 To prepare test solutions for products and oil/product mixtures, blend or mix the test solutions with an electric blender having: speeds of 10,000 rpm or less; a stainless-steel cutting assembly; and a 1-liter borosilicate jar. To minimize foaming, blend at speeds below 10,000 rpm.

3.5.2.2 For the product test solution, add 550 ml of the synthetic seawater to the jar, then with the use of a gas-tight calibrated glass syringe with a Teflon-tipped plunger, add 0.55 ml of the product and mix for 5 seconds.

3.5.2.3 For the oil test solution, add 550 ml of the synthetic seawater to the jar. Then with the use of a gas-tight calibrated glass syringe equipped with a Teflon-tipped plunger, add 0.55 ml of the oil and mix for 5 seconds.

3.5.2.4 For the oil/product mixture, add 550 ml of the synthetic seawater to the mixing jar. While the blender is in operation, add 0.5 ml of the oil under study with the use of a calibrated syringe with a Teflon-tipper plunger and then 0.05 ml of the product as indicated above. Blend for 5 seconds after addition of product. These additions provide test solutions of the product, oil, and the oil/product mixture at concentrations of 1,000 ppm.

3.5.2.5 Immediately after the test solutions are prepared, draw up the necessary amount of test solution with a gas-tight Teflon-tipped glass syringe of appropriate size and dispense into each of the five containers in each series. If the series of five concentrations to be tested are 10, 18, 32, 56, and 100 ppm, the amount of the test solution in the order of the concentrations listed above would be as follows: 10, 18, 32, 56, and 100 ml.

3.5.2.6 Each time a syringe is to be filled for dispensing to the series of test containers, start the mixer and withdraw the desired amount in the appropriate syringe while the mixer is in operation. Turn off immediately after the sample is taken to limit the loss of volatiles.

3.5.2.7 Use exploratory tests before the full-scale test is set up to determine the concentration of toxicant to be used in each of the five different concentrations. After adding the required amounts of liquid, bring the volume in each of the test containers up to 800 ml with the artificial seawater. To ensure keeping each of the series separate, designate on the lid of each container the date, the material under test, and its concentration.

3.5.2.8 When the desired concentrations are prepared, gently

release into each beaker the 10 test Mysidopsis (previously transferred into 200 ml of medium). This provides a volume of 1 liter in each test chamber. A pair of standard cover glass forceps with flat, bent ends is an ideal tool for handling and tipping the small beaker without risk of contaminating the medium.

3.5.2.9 After adding the test animals, incubate the test beakers at 25 ± 1 deg.C for 48 hours. Recommended lighting is 2,000 lumens/m² (200 ft-c) of diffused, constant, fluorescent illumination.

3.5.2.10 Wash the blender thoroughly after use and repeat the above procedures for each series of tests. Wash the blender as follows: rinse with normal hexane; pour a strong solution of laboratory detergent into the blender to cover the blades; fill the container to about half of its volume with hot tap water; operate the blender for about 30 seconds at high speed; remove and rinse twice with hot tap water, mixing each rinse for 5 seconds at high speed; and then rinse twice with distilled water, mixing each rinse for 5 seconds at high speed.

3.6 Calculating and reporting. At the end of the test period, the toxicity tests are terminated and the LC₅₀ values are determined.

3.6.1 Calculations. The LC₅₀ is the concentration lethal to 50% of the test population. It can be calculated as an interpolated value based on percentages of organisms surviving at two or more concentrations, at which less than half and more than half survived. The LC₅₀ can be estimated with the aid of computer programs or graphic techniques (log paper). The 95% confidence intervals for the LC₅₀ estimate should also be determined.

3.6.2 Reporting. The test product and oil and their source and storage are described in the toxicity test report. Note any observed changes in the experimental water or the test solutions. Also include the species of fish used; the sources, size, and condition of the fish; data of any known treatment of the fish for disease or infestation with parasites before their use; and any observations on the fish behavior at regular intervals during the tests. In addition to the calculated LC₅₀ values, other data necessary for interpretation (e.g., DO, pH, other physical parameters, and the percent survival at the end of each day of exposure at each concentration of toxicant) should be reported.

3.7 Summary of procedures. 3.7.1 Menidia:

1. Prepare adequate stocks of the appropriate standard dilution water.

2. Add 2 liters of the standard dilution water to the test jars. Each test consists of 5 replicates of each of 5 concentrations of the test material, a control series of 5 beakers, and a standard reference series of 5 different concentrations for a total of 35 beakers. Simultaneous performance of toxicity tests on the oil, product, and oil/product mixture requires a total of 105 beakers.

3. Add the determined amount (quarter points on the log scale) of test material to the appropriate jars. Preliminary tests will be necessary to define the range of definitive test concentrations.

4. Cap the jars tightly with the Teflon-lined screw caps and shake for 5 minutes at 315 to 333 2-cm (0.75-inch) strokes per minute on a reciprocal shaker.

5. Remove the jars from the shaker, take water quality data, dispense 1 liter of solution to the 1-liter glass beaker, and add 10 acclimated fish per beaker.

6. Aerate with 100 ± 15 bubbles per minute through a 1-ml serological pipette, as needed, to maintain DO above 4.0 mg/l.

7. Observe and record mortalities, water quality, and behavioral changes every 24 hours.

8. After 96 hours, terminate the test, and calculate LC₅₀ values and corresponding confidence limits.

3.7.2 Mysidopsis:

1. Initiate the procedure for hatching the Mysidopsis in sufficient time before the toxicity test is to be conducted so that 5-7 day old larvae are available.

2. With the use of a small pipette, transfer 10 Mysidopsis into small beakers, each containing 200 ml of the proper synthetic seawater.

3. To prepare the test stock product and oil solutions, add 550 ml of the artificial seawater to the prescribed blender jar. By means of a gas-tight glass syringe with a Teflon-tipped plunger, add 0.55 ml of the product (or oil) and mix at 10,000 rpm for 5 seconds. To prepare the test stock oil/product mixture, add 550 ml of the standard seawater to the blender jar. While the blender is in operation (10,000 rpm), add 0.5 ml of the oil, then 0.05 ml of the product with the use of a calibrated syringe with a Teflon-tipped plunger. Blend for 5 seconds after adding the product. One ml of these stock solutions added to the 100 ml of standard seawater in the test containers yields a concentration of 10 ppm product, oil, or oil/product combination (the test will be in a ratio of 1 **part** product to 10 parts of oil).

4. Each test consists of 5 replications of each of 5 concentrations of the material under study, a control series of 5 beakers and a standard reference series of 5 different concentrations, for a total of 35 beakers. Simultaneous performance of toxicity tests on the oil, product, and oil/product mixture requires a total of 105 beakers. Immediately after preparing the test solution of the product or oil/product solution, and using an appropriately sized syringe, draw up the necessary amount of test solution and dispense into each of the five containers in each series. Each time a syringe is to be filled for dispensing to the series of test containers, start the mixer and withdraw the desired amount in the appropriate syringe while the mixer is in operation. Turn mixer off immediately after the sample is taken to limit the loss of volatiles. After adding the required amount of the test oil/product or product mixture, bring the volume of liquid in each of the test containers up to 800 ml with the artificial seawater. When the desired concentrations have been prepared, gently release into each beaker the 10 mysids previously transferred into 200 ml of medium. This provides a volume of 1 liter in each test chamber.

5. Wash the blender as prescribed for each series of tests.

6. Incubate the test beakers at 25 \pm 1 deg.C for 48 hours with the prescribed lighting.

7. Terminate the experiment after 48 hours, observe and record the mortalities, and determine the LC₅₀s and corresponding confidence limits.

4.0 Bioremediation agent effectiveness test

4.1 Summary of method. The bioremediation agent effectiveness testing protocol is designed to determine a product's ability to biodegrade oil by quantifying changes in the oil composition resulting from biodegradation. The protocol tests for microbial activity and quantifies the disappearance of saturated hydrocarbons and polynuclear aromatic hydrocarbons (PAHs). The sample preparation procedure extracts the oil phase into dichloromethane (DCM), with a

subsequent solvent exchange into hexane. To effectively accomplish the goals of the testing protocol, it is necessary to normalize the concentration of the various analytes in oil to a non-biodegradable marker, either C<INF>2-or C<INF>3-phenanthrene, C<INF>2-chrysene, or hopane<SUP>1 (7). The test method targets the relatively easy to degrade normal alkanes and the more resistant and toxic PAHs. It normalizes their concentrations to C<INF>2-or C<INF>3-phenanthrene, C<INF>2-chrysene, or C<INF>3017<greek-a>(H), 21<greek-b>(H)-hopane on an oil weight basis (mg marker/kg oil, mg target analyte/kg oil). The analytical technique uses a high resolution gas chromatograph/mass spectrometer (GC/MS) because of its high degree of chemical separation and spectral resolution. GC/MS has long been used to study the weathering and fate of oil spilled into the environment. For quantitative analyses, the instrument is operated in the selective ion detection (SIM) mode at a scan rate of greater than 1.5 scans per second to maximize the linear quantitative range and precision of the instrument. The sample preparation method does not exclude analysis of selected samples by GC/MS in the full scanning mode of operation to qualitatively assess changes in the oil not accounted for by the SIM approach. Performed concurrently with the chemical analysis described above is a microbiological analysis. The microbiological analysis is performed to determine and monitor the viability of the microbial cultures being studied. Under this procedure, microbial enumerations of hydrocarbon degraders are performed at each sampling event using a microtiter Most Probable Number (MPN) determination.

\1\Although any of these biomarkers can be used to conduct this test, it is recommended that hopane be used.

4.2 Apparatus. The following materials and equipment are required for the protocol: Appropriate flasks and other glassware; sterile tubes; graduated cylinders (100-ml); deionized water; p-iodonitrotetrazolium violet dye; weighing pans or paper; 250-ml borosilicate glass Erlenmeyer flasks with screw tops; Pasteur pipettes; laboratory notebook; microtiter MPN plates (24-well) multi-channel pipetting device; dilution tube and caps; autoclave; **environmental** room or incubator; balance accurate to 0.1 mg (XD-400); GC/MS instrument equipped with a DB-5 capillary column (30 m, 0.25-mm I.D., and 0.25-<greek-m>m film thickness) and a split/splitless injection port operating in the splitless mode, such as Hewlett-Packard 5890/5971 GC/MS (recommended for use); and an autosampler for testing multiple samples.

4.3 Reagents and culture medium. 4.3.1 Preparation of seawater. All products are tested in clean natural seawater. Clean natural seawater means that the source of this seawater must not be heavily contaminated with industrial or other types of effluent. For example, seawater should not be obtained from a source near shipping channels or discharges of industrial or municipal wastewater, or with high turbidity. The seawater is used within seven days of collection. No microbial inoculum is added.

4.3.2 Preparation of oil. A medium weight crude oil, Alaska North Slope (ANS), is artificially weathered by heating to 521 deg.F to remove the light end hydrocarbons prior to experimental start-up (ANS 521). The method is described in the Draft International Standard ISO/DIS 8708 ``Crude Petroleum Oil--Determination of Distillation Characteristics Using 15 Theoretical Plates Columns''

by the International Organization for Standardization (8). The ANS521 crude oil can be obtained from the National **Environmental** Technology Applications Center's (NETAC) Bioremediation Products Evaluation Center (BPEC), University of Pittsburgh Applied Research Center, 615 William Pitt Way, Pittsburgh, PA, 15238, (412) 826-5511. The crude oil is heated to 190 deg.C (374 deg.F) under atmospheric pressure. The system is then cooled and placed under vacuum (or under an atmospheric pressure of 20 mm Hg) for the final distillation to an atmospheric equivalent boiling point of 272 deg.C (521 deg.F).

4.3.3 Preparation of mineral nutrient solution. If a commercial product is strictly a microbial agent and does not contain its own nutrients, a mineral nutrient solution will be provided if requested by the product manufacturer or vendor. If a commercial product contains its own nutrients, no further nutrients will be added. The nutrient solution is a modified salt solution and is described below.

4.3.3.1 Nutrient preparation:

1. N&P Salts. The following salts are added to distilled water and made up to a 1,000-ml volume. Adjust final pH to 7.8. The solution is sterilized by autoclaving at 121 deg.C at 15 psig for 20 minutes or by filtering through a sterile 0.22 μ m membrane filter.

Na₂HPO₄ 18.40 g
KNO₃ 76.30 g

2. MgSO₄ 20 solution. Dissolve 22.50 g in 1,000 ml distilled water. The solution is sterilized by autoclaving at 121 deg.C at 15 psig for 20 minutes.

3. CaCl₂ solution. Dissolve 27.50 g in 1,000 ml of distilled water. The solution is sterilized by autoclaving at 121 deg.C at 15 psig for 20 minutes.

4. FeCl₃ 6H₂O solution. Dissolve 0.25 g in 1,000 ml of distilled water. The solution is sterilized by autoclaving at 121 deg.C at 15 psig for 20 minutes.

5. Trace Element Solution. The following salts are added to distilled water and made up to a 1,000-ml volume. The solution is sterilized by autoclaving at 121 deg.C at 15 psig for 20 minutes.

MnSO₄ 30.2 mg
H₃BO₃ 57.2 mg
ZnSO₄ 42.8 mg
(NH₄)₆Mo₇(O₂)₄ 34.7 mg

The pH of the nutrient solution is adjusted with a pH meter calibrated at room temperature (approximately 25 deg.C) using commercial buffers of pH 4.0, 7.0, and 10.0 (Fisher Scientific), as appropriate, prior to use. The pH is adjusted with concentrated HCl or 10 M NaOH, as appropriate.

4.3.3.2 Final concentrations: Ten (10) ml of solution 1 and 2 ml of solutions 2-5 are added to non-sterile seawater and made up to a 1,000-ml volume immediately prior to test start-up. This seawater/mineral nutrient solution is used for all flasks containing products requiring nutrient supplements and for the flasks containing no commercial additive. Seawater without the above nutrient solutions is used for products containing their own source of nutrients.

4.4 Pretest preparation.

4.4.1 Experimental setup.

4.4.1.1 The procedure consists of an experimental shaker flask setup and the specific set of microbiological and chemical analyses that are performed on individual product samples. The following test flasks (labeled with unique identifiers) are prepared and set up on a gyratory shaker at day 0 to reflect the following treatment design:

No. of samples at sampling times Treatment				Total No. of analytical determinations	
Microbial				Day 0	Day 7
Day 28	counts	Gravimetric	GC/MS		
Control.....				3	3
3	9	9	9		
Nutrient.....				3	3
3	9	9	9		
Product.....				3	3
3	9	9	9		

Control = Oil + Seawater

Nutrient = Oil + Seawater + Nutrient

Product = Oil + Seawater + Product (+ Nutrient, if required).

4.4.1.2 For each test, a sheet listing the number of flasks, types of controls, number of replicates, product to be tested, and other information is prepared. The following steps should be adhered to for the experimental setup:

1. Borosilicate glass Erlenmeyer flasks (250-ml) are thoroughly cleaned and autoclaved for 20 minutes at 120 deg.C at 15 psi, then dried in the drying oven.
2. Flasks are labeled with the appropriate code: product or control, sample day, and letter indicating replicate.
3. 100 ml of seawater is added to each flask.
4. For nutrient and product treatments that require the addition of nutrients, seawater containing the nutrient solution is prepared.
5. Pasteur pipettes should be sterilized in advance. Break off the tip to provide a larger opening prior to sterilization.
6. Pour the approximate amount of oil to be used from the large stock bottle into a sterile beaker. Keep the beaker covered when oil is not being removed.
7. The labeled flasks containing seawater and other additions, as necessary, are placed on the balance. The flask is tared. The appropriate amount of oil (0.5 g) is added drop by drop using a sterile Pasteur pipette with the tip broken off to provide a wider opening. Care is taken to avoid splashing the oil or getting it on the sides of flasks. Precautions are taken when handling and charging the flasks to minimize the likelihood of contamination by exogenous microbes. This includes using a new sterile pipette for each series of flasks.

8. The weight of the oil is recorded in the laboratory notebook.
9. The product is prepared and added to the appropriate flasks according to the manufacturer's or vendor's instructions.

10. Flasks are carried upright and carefully placed in the holders on the shaker table to minimize the amount of oil that might adhere to the side of the flasks. Flasks in which a significant amount of oil is splashed on the sides are redone.

11. The prepared flasks are shaken at 200 rpm at 20 deg.C until such time that they will be removed for sampling.

4.4.2 Sampling. The control and treatments (nutrient and product flasks) are sampled three times over a 28-day period: day 0, day 7, and day 28. The entire flask is sacrificed for analysis; a 0.5-ml aliquot is removed from each flask for the microbiological analysis and the remainder of each flask is used for the chemical analysis. Specific procedures for both the microbiological and chemical analysis are described below. At the time of each sampling event, physical observations of each flask should be recorded.

4.5 Microbiological analysis. To monitor the viability of the microbial cultures being studied, microbial enumerations of hydrocarbon degraders are performed at each sampling event using a microtiter MPN determination. This is used as an indicator of the relative change in biomass. This test design relies on using growth response as an indication of enhanced activity as compared to a "no addition" control.

4.5.1 Media preparation. Media for microbial enumerations are carefully prepared according to manufacturer's or other instructions and sterilized using appropriate methods.

4.5.1.1 General media treatment: Buy Bushnell-Haas (B-H) broth in quantities to last no longer than one year. Use media on a first-in, first-out basis. When practical, buy media in quarter-pound multiples, rather than one-pound multiples to keep supply sealed as long as possible. Keep an inventory of media, including kind, amount, lot number, expiration date, date received, and date opened. Check inventory before reordering media. Discard media that are caked, discolored, or show other deterioration.

4.5.1.2 Sterile saline (pH adjusted):

1. Weigh 30 g of NaCl.
2. Dissolve in enough water to make 1,000 ml.
3. Adjust pH to 8.0 with NaOH (10M and 0.5M).
4. Sterilize by autoclaving for 15 minutes at 15 psig.

4.5.1.3 Standard nutrient concentrate (add 1 ml to each 100 ml of Bushnell-Haas medium for MPNs):

1. Weigh compounds listed below, dissolve in DIH $\times 20$, dilute to 1 liter.

Potassium Phosphate, monobasic KH $\times 2$ PO $\times 4$ --0.633 g

Potassium Phosphate, dibasic K $\times 2$ HPO $\times 4$ --1.619 g

Sodium Phosphate, dibasic Na $\times 2$ HPO $\times 4$ --2.486 g

Ammonium Chloride NH $\times 4$ Cl--3.850 g

Magnesium Sulfate, heptahydrate MgSO $\times 4$ $\times 7$ H $\times 2$ O--4.500 g

Calcium Chloride, dihydrate CaCl $\times 2$ $\times 2$ H $\times 2$ O--7.290 g

Ferric Chloride, hexahydrate FeCl $\times 3$ $\times 6$ H $\times 2$ O--0.250 g

Trace Elements

Manganese Sulfate, monohydrate MnSO $\times 2$ $\times 1$ H $\times 2$ O--6.04 mg

Boric Acid H $\times 3$ Bo $\times 3$ --11.44 mg

Zinc Sulfate, heptahydrate ZnSO $\times 4$ $\times 7$ H $\times 2$ O--8.56 mg

Ammonium Molybdate, tetrahydrate

(NH $\times 4$) $\times 6$ Mo $\times 7$ O $\times 24$ $\times 4$ H $\times 2$ O--6.94 mg

2. Adjust pH to 6.0.
3. Stir solution for approximately 3 hours, then filter through a Buchner funnel using #1 paper, which will retain approximately 3.8 g of insolubles.
4. Then filter through a 0.45 micron filter into sterile bottles.
5. Cap bottles, label, and store in refrigerator until used.
- 4.5.1.4 Quality assurance/Quality control (QA/QC):
 1. Periodically check the effectiveness of sterilization using commercially available tapes or Bacillus stearothermophilus spore suspensions, following the instructions with these products.
 2. Maintain a media log book that includes the dates, kinds and amounts of media made, pH, and any problems or observations.
 3. Before use, check plates and tubes for signs of contamination, drying, or other problems.
- 4.5.1.5 Safety/Special precautions:
 1. Note any safety or other precautions for particular media.
 2. Note precautions to be followed when using the autoclave.
 3. Use gloves and other protective clothes when handling media.
 4. Use care in handling hot media.
- 4.5.2 Microbial enumeration. Standardized techniques for performing Most Probable Number microbial enumerations are described below.
 - 4.5.2.1 Dilutions:
 1. Prior to sacrificing each flask, remove 0.5 ml of water from each flask and add it to a tube of 4.5 ml sterile phosphate buffer (1:10 dilution) as prepared in the Standard Methods for the Examination of Water and Wastewater (9). Using sterile technique, mix and perform serial dilutions (0.5 ml of previous dilution to 4.5 ml of sterile phosphate buffer) to 10⁻⁹ dilution.
 - 4.5.2.2 Inoculating MPN plates (oil degrader):
 1. Prepare sufficient sterile 0.4 M NaCl (23.4 g NaCl/1,000 ml B-H) and B-H at pH 7.0 to fill the number of wells required for the test (1.75 ml/well).
 2. Using sterile technique, add 1.75 ml of B-H broth to each well.
 3. Label the top of the plate with the proper dilution for each row.
 4. Add 0.1 ml of fluid from each dilution tube to each well in the appropriate row, starting with the most dilute.
 5. After adding the fluid to all the wells, add 20 μ l of sterilized No. 2 fuel oil to the top of each well.
 6. Incubate each plate at 20 deg.C.
 7. After 14 days of incubation, add 100 μ l of p-iodotetrazolium violet dye (50 mg/10 ml of D.I. water) to each well to determine growth.
 8. View plates against a white background to determine if color is present. Development of a purple or pink color upon standing for 45 minutes constitutes a positive test.
 9. Record the number of positive wells and the dilutions at which they occur.
 10. Enter data into a computerized enumeration method using ``MPN Calculator'' software program (version 2.3 or higher) by Albert J. Klee, U.S. EPA Office of Research and Development, Risk Reduction Engineering Laboratory, Cincinnati, OH.
 - 4.5.2.3 Quality assurance/Quality control:
 1. Check pH of medium before preparing wells (pH should be approximately 8.0). Adjust pH, if necessary, with dilute NaOH.
 2. Keep prepared tetrazolium violet dye solution in the refrigerator in an amber bottle when not in use.

3. Have all laboratory personnel periodically run MPNs on the same sample to test precision.

4.5.2.4 Safety/Special precautions:

1. Use sterile technique in preparing solutions, dilutions, plates, and MPN wells.

2. Do not pipette potentially hazardous solutions by mouth.

3. Autoclave all plates and wells before discarding.

4.6 Chemical analysis of oil composition.

4.6.1 Sample procedure. After 0, 7, and 28 days of incubation on a rotary shaker, the appropriate flasks are sacrificed and extracted with dichloromethane and spiked with a surrogate recovery standard. A 10-ml aliquot of the DCM layer is used for the gravimetric analysis. If significant biodegradation is evident in the results of the gravimetric analysis, then a solvent exchange into hexane takes place prior to the GC/MS analysis. Follow steps 1-19 below when preparing for the chemical analysis.

1. After 0, 7, and 28 days of rotary shaking and incubating at 20 deg.C, the reaction vessels are sacrificed. Prior to the chemical analysis, a 0.5-ml sample of the aqueous phase is removed for the microbiological analysis (see Microbial Enumeration above).

2. A surrogate recovery standard is prepared in the following manner: 1,000 mg of d<INF>10-phenanthrene and 1,000 mg of 5<greek-a>-androstane are measured into a 500-ml volumetric flask and DCM is added to the mark to produce a 2,000-ng/<greek-m>l stock solution.

3. A 100-<greek-m>l aliquot of the surrogate solution is added to each test flask. The final concentration of surrogates in each flask is approximately 4 ng/<greek-m>l of solvent in the final extract. The aliphatics and marker data should be corrected for percent recovery of the 5<greek-a>-androstane surrogate and the aromatics for the d<INF>10-phenanthrene surrogate.

4. The contents of the flask are placed into a 250-ml separatory funnel.

5. Measure a total volume of 50 ml DCM for use in the extraction. Use 3 10-ml fractions to rinse the flask into the funnel and transfer the remaining aliquot of DCM to the funnel.

6. Stopper and mix vigorously by shaking (approximately 50 times) while ventilating properly.

7. Each funnel is set aside to allow the DCM and water layers to partition. This may take 5-10 minutes for some products, or up to 3 hours if the product has caused the formation of an emulsion.

8. Drain the first 10 ml of the DCM (bottom) layer, collect, cap, uniquely label, and use for gravimetric analysis (see below). Drain the remaining 40 ml and dry it by passing it through a funnel packed with anhydrous sodium sulfate.

9. Assemble a Kuderna-Danish (KD) concentrator by attaching a Snyder column to an evaporation flask with a graduated concentrator tube. Align vertically and partially immerse concentrator tube in a water bath (10). Set the water bath to the appropriate temperature to maintain proper distillation.

10. Collect the de-watered extract into the KD concentrator.

11. Evaporate DCM to approximately 10 ml, then add approximately 50 ml of the exchange solvent (hexane) and concentrate the volume to 10 ml.

12. Rinse the flask into the concentrator tube with 50 ml hexane and concentrate to 10 ml. Repeat one more time with 50 ml of hexane.

13. Remove concentrator tube with the recovered 10 ml of sample volume. The heavier residual material should be present as a precipitate (bottom layer).

14. Centrifuge to aid the separation of the hexane from the precipitant fraction.

15. Place hexane-soluble fraction (top layer)--approximately 1.0 ml--into a GC/MS vial for analysis (see GC/MS Analysis Procedure below). If column fouling and deterioration of separation characteristics occur, an alumina column sample cleanup method can be considered (see Alternative GC/MS Sample Cleanup Procedure below).

16. Analyze by GC/MS using the conditions determined by the U.S. EPA Risk Reduction Engineering Laboratory, Water and Hazardous Waste Treatment Research Division, in Cincinnati, OH, which follows U.S. EPA Method 8270 (see GC/MS Analysis Procedure below).

17. Calculate surrogate recovery. If surrogate recovery is less than 85 percent for the marker relative to the surrogate recovery standard (d<INF>10-phenanthrene), then the water layer should be extracted again using three separate extractions with DCM. Pool the three extractions with original extract and concentrate to 10 ml, and reanalyze by GC/MS.

18. Drain the seawater into a storage sample vial/container.

19. Seal the vial with a Teflon-lined cap and store frozen. This water layer is kept in case additional extractions are necessary.

4.6.2 Gravimetric analysis. The initial means to evaluate the effectiveness of a bioremediation agent for oil spill response is through gravimetric analysis. A statistically significant difference ($p < 0.05$) in analytical weight of the oil from the control system as compared to the analytical weight of the oil treated with a bioremediation agent indicates biodegradation has successfully occurred. Hence, the disappearance of oil should be accompanied by significant decreases in total oil residue weight of extractable materials versus a control. If no significant decrease in oil residue weight is observed, the need to perform further chemical analysis should be evaluated. Follow steps 1-3 to conduct the gravimetric analysis.

1. The 10 ml of DCM extract (from Sample Procedure step 8 above) is placed in a small vial and concentrated to dryness by nitrogen blowdown techniques using a steady stream of nitrogen (pre-purified gas). If the oil is severely biodegraded, a larger volume of DCM (>10 ml) may be necessary for the gravimetric analysis.

2. The residue is weighed 3 times for the gravimetric weight of oil. Record the weight of the oil.

3. Compare statistically ($p < 0.05$) the weight of the product treatment versus the weight of the control from each respective time period. If a significant decrease is observed in the sampling (flask containing bioremediation agent) weight, then proceed with the remainder of the sample procedure.

4.6.3 GC/MS analysis. Often, analysis of saturated and aromatic hydrocarbons by capillary gas chromatography of DCM extracts leads to column fouling and deterioration of separation characteristics. An alternative, simple ``one-step'' alumina sample cleanup procedure can be performed on oil before injection; this cleanup removes both asphaltenes and polar compounds and can be applied to DCM extracts as well. This procedure is described in steps 1-11 below.

4.6.3.1 Alternative GC/MS sample cleanup procedure:

1. Weigh 4.0 g alumina (neutral, 80-200 mesh) into scintillation vials covered loosely with aluminum foil caps. Prepare one scintillation vial per sample. Heat for 18 hours at 300 deg.C or longer. Place in a desiccator of silica until needed.

2. Add 5.0 ml of DCM to a glass luerlok multi-fit syringe (e.g., BD #2471) with stopcock (e.g., Perfectum #6021) in closed position,

stainless steel syringe needle (18 gauge), and PTFE frits. Clamp in a vertical position.

3. Transfer 4.0 g of prepared alumina to a plastic weighing boat and fill syringe slowly while applying continuous vibration (e.g., Conair #HM 11FF1).

4. Add a second PTFE frit and push into place on top of the alumina bed.

5. Drain 5.0 ml DCM to the top level of the column frit to await sample addition and discard DCM.

6. Weigh 50 mg \pm 0.1 mg ANS521 oil into a tared vial.

7. Premeasure 10 ml of DCM into a graduated cylinder. Add 0.2 to 0.3 ml of the DCM to the tared oil vial. Mix and transfer solvent to the column bed with a Pasteur pipette. Open stopcock and collect in a 10-ml volumetric flask. Repeat until approximately 1.0 ml (do not exceed 1.0 ml) of DCM has rinsed the vial and inner walls of the syringe body into the 10-ml flask.

8. Transfer balance of DCM from the graduated cylinder to the column and regulate the solvent flow rate to approximately 1 to 2 ml/minute. Collect all eluent in the 10-ml flask.

9. Transfer a known volume of eluent to another scintillation vial and blow down to dryness (nitrogen).

10. Determine and record weight.

11. Dissolve in 1.0 ml hexane for the GC/MS analysis procedure (see below).

4.6.3.2 GC/MS analysis procedure:

Immediately prior to injection, an internal standard solution of four deuterated compounds is spiked into the sample extracts and injected. Samples are quantified using the internal standard technique (10) for both the aliphatic and aromatic fractions of the oil extracts in order to provide sufficient information that the oil is being degraded. To help ensure that the observed decline in target analytes is caused by biodegradation rather than by physical loss from mishandling or inefficient extraction, it is necessary to normalize the concentrations of the target analytes via a "conserved internal marker." Conserved internal markers that have been found useful for quantification are C₂- or C₃-phenanthrene, C₂-chrysene, and C₃₀17₂₁(H)₂₁(H)-hopane. Deuterated internal standards are used to calculate the relative response factor (RRF) for the target analyte(s). To compute the "normalized concentrations," the target analyte concentration at a given sampling time is simply divided by the selected conserved analyte concentration at the same sampling time (11). Conduct the GC/MS analysis using the following procedure.

1. One (1) ml of the hexane extract (from Sample Procedure step 15 above) is placed into a 1.5-ml vial for use on the autosampler of the GC/MS instrument.

2. To this solution, 20 μ l of a 500-ng/ μ l solution of the internal standards is added and the vial is capped for injection. The final concentration of the internal standards in each sample is 10 ng/ μ l. This solution contains 4 deuterated compounds: d₈-naphthalene, d₁₀-anthracene, d₁₂-chrysene, and d₁₂-perylene.

3. At the start of any analysis period, the mass spectrometer (MS) is tuned to PFTBA by an autotune program, such as the Hewlett-Packard quicktune routine, to reduce operator variability. Set the GC/MS in the SIM mode at a scan rate of 1.5 scans/second to maximize the linear quantitative range and precision of the instrument. Set all other conditions to those specified in Instrument Configuration and Calibration section below.

4. An instrument blank and a daily standard are analyzed prior to analysis of unknowns. Internal standards are combined with the sample extracts and coinjected with each analysis to monitor the instrument's performance during each run.

5. Information that should be included on the acquisition form include operator's name and signature, date of extraction, date and time of autotune, date of injection(s), instrument blank, daily standard mix injection, GC column number, and standards for the 5-point calibration curve.

6. If the instrument is operated for a period of time greater than 12 hours, the tune will be checked and another daily standard analyzed prior to continuing with analyses.

Table 6.--Analytes Listed Under the
Corresponding Internal Standard Used for Calculating RRFs

Internal Standard		d<INF>8-naphthalene	
d<INF>10-anthracene		d<INF>12-chrysene	
d<INF>12-perylene			

Alkanes.....	nC10-nC15.....		
nC16-nC23.....	nC24-nC29.....	nC30-nC35.	
Pristane.....			
C<INF>3017<greek-b>(H) , 21<greek-a>(H) -			
		hopane.	
Phytane.....			
.....			
5<greek-a>-androstane....			
.....			
Aromatics.....	Naphthalene.....		
Dibenzothiophene.....	Fluoranthene.....		
Benzo(b) fluoranthene.			
Fluorene.....	Pyrene.....		
Benzo(k) fluoranthene.			
Anthracene.....	Chrysene.....	Benzo(e)pyrene.	
Phenanthrene.....		Benzo(a)pyrene.	
		Perylene.	
		Indeno(g,h,i)pyrene.	
		Dibenzo(a,h) anthracene.	

Benzo(1,2,3-cd)perylene.

7. The MS is calibrated using a modified version of EPA Method 8270 (10). Specifically, the concentrations of internal standards are 10 ng/<greek-m>l instead of 40 ng/<greek-m>l. A five-point calibration curve is obtained for each compound listed in Table 6 prior to sample analysis at 1, 5, 10, 25, and 50 ng/<greek-m>l. A 5-point calibration must be conducted on a standard mix of compounds to determine RRFs for the analytes. The standard mix (excluding the marker) for this calibration curve may be obtained from Absolute Standards, Inc., 498 Russell St., New Haven, CT, 06513, (800) 368-1131. If C<INF>3017<greek-b>(H),21<greek-a>(H)-hopane is used, it may be obtained from Dr. Charles Kennicutt II, Geochemical and **Environmental** Research Group, Texas A&M University, 833 Graham Rd., College Station, TX, 77845, (409) 690-0095.

8. Calculate each compound's relative response factor to its corresponding deuterated internal standard indicated above, using the following equation:

$$RRF = (A_{<INF>x} C_{<INF>is}) / (A_{<INF>is} C_{<INF>x}) \quad (6)$$

where:

RRF=relative response factor

A<INF>x=peak area of the characteristic ion for the compound being measured (analyte)

A<INF>is=peak area of the characteristic ion for the specific internal standard

C<INF>x=concentration of the compound being measured (ng/<greek-m>l)

C<INF>is=concentration of the specific internal standard (10 ng/<greek-m>l). (This concentration is a constant in this equation for the calibration curve.)

9. Identify each analyte based on the integrated abundance from the primary characteristic ion indicated in Table 7.

10. Quantitate each analyte using the internal standard technique. The internal standard used shall be the one nearest the retention time of that of a given analyte (Table 8).

Table 7.--Primary Ions Monitored for Each Target Analyte During GC/MS Analysis

Compound	Ion
n-alkanes	
(C<INF>10-C<INF>35).....	85
Pristane.....	85
Phytane.....	85
Naphthalene.....	128
C1-naphthalenes.....	142
C2-naphthalenes.....	156
C3-naphthalenes.....	170

C4-naphthalenes.....	184
Fluorene.....	166
C1-fluorenes.....	180
C2-fluorenes.....	194
C3-fluorenes.....	208
Dibenzothiophenes.....	184
C1-dibenzothiophenes.....	198
C2-dibenzothiophenes.....	212
C3-dibenzothiophenes.....	226
Anthracene.....	178
Phenanthrene.....	178
C1-phenanthrenes.....	192
C2-phenanthrenes.....	206
C3-phenanthrenes.....	220
Fluoranthene/pyrene.....	202
C1-pyrenes.....	216
C2-pyrenes.....	230
Chrysene.....	228
C1-chrysenes.....	242
C2-chrysenes.....	256
Hopanes (177 family).....	177
Hopanes (191 family).....	191
Steranes (217 family).....	217
Benzo (b) fluoranthene.....	252
Benzo (k) fluoranthene.....	252
Benzo (e) pyrene.....	252
Benzo (a) pyrene.....	252
Perylene.....	252
Ideno (g, h, i) pyrene.....	276
Dibenzo (a, h) anthracene.....	278
Benzo (1, 2, 3-cd) perylene.....	276
d<INF>8-naphthalene.....	136
d<INF>10-anthracene.....	188
d<INF>10-phenanthrene.....	188
d<INF>12-chrysene.....	240
d<INF>12-perylene.....	264
<greek-a>-androstane.....	260

Table 8.--Analytes and Reference Compounds

Compound	Reference compound	Compound	Reference compound
n-C10.....	n-C10.....	C2-naphthalene..	Naphthalene.
n-C11.....	n-C11.....	C3-naphthalene..	Naphthalene.
n-C12.....	n-C12.....	C4-naphthalene..	Naphthalene.
n-C13.....	n-C13.....	Fluorene.....	Fluorene.
n-C14.....	n-C14.....	C1-fluorene.....	Fluorene.
n-C15.....	n-C15.....	C2-fluorene.....	Fluorene.
n-C16.....	n-C16.....	C3-fluorene.....	Fluorene.
n-C17.....	n-C17.....	Dibenzothiophene	Dibenzothiophene

Pristane.....	Pristane.....	C1-dibenzothiophene.	Dibenzothiophene.
n-C18.....	n-C18.....	C2-dibenzothiophene.	Dibenzothiophene.
Phytane.....	Phytane.....	C3-dibenzothiophene.	Dibenzothiophene.
n-C19.....	n-C19.....	Phenanthrene....	Phenanthrene.
n-C20.....	n-C20.....	Anthracene.....	Anthracene.
n-C21.....	n-C21.....	C1-phenanthrene.	Phenanthrene.
n-C22.....	n-C22.....	C2-phenanthrene.	Phenanthrene.
n-C23.....	n-C23.....	C3-phenanthrene.	Phenanthrene.
n-C24.....	n-C24.....	Fluoranthene....	Fluoranthene.
n-C25.....	n-C25.....	Pyrene.....	Pyrene.
n-C26.....	n-C26.....	C1-pyrene.....	Pyrene.
n-C27.....	n-C27.....	C2-pyrene.....	Pyrene.
n-C28.....	n-C28.....	Chrysene.....	Chrysene.
n-C29.....	n-C29.....	C1-chrysene.....	Chrysene.
n-C30.....	n-C30.....	C2-chrysene.....	Chrysene.
n-C31.....	n-C31.....	Benzo (b) fluoranthene.	Benzo (b) fluoranthene.
n-C32.....	n-C32.....	Benzo (k) fluoranthene.	Benzo (k) fluoranthene.
n-C33.....	n-C33.....	Benzo (e) pyrene..	Benzo (e) pyrene.
n-C34.....	n-C34.....	Benzo (a) pyrene..	Benzo (a) pyrene.
n-C35 C<INF>3017<greek-b>-Perylene	n-C35 C<INF>3017<greek-b>-Perylene		
a>,21<greek-b>-hopane.	a>,21<greek-b>-hopane.	ideno (g,h,i) pyrene.	ideno (g,h,i) pyrene.
5<greek-a>-androstane.	5<greek-a>-androstane.	Dibenzo (a,h) anthracene.	Dibenzo (a,h) anthracene.
C1-naphthalene...	Naphthalene.....	Benzo (1,2,3-cd) perylene.	Benzo (1,2,3-cd) perylene.

11. Use equation 7 to calculate the concentration of analytes in ng/mg (ppm) oil:

$$\text{Concentration (ng/mg)} = \frac{(A_{\text{I}} \times I_{\text{S}} \times V_{\text{T}} \times 1,000)}{(A_{\text{IS}} \times \text{RRF}) \times V_{\text{I}} \times M_{\text{O}}} \quad (7)$$

where:

A_{I} = peak area of characteristic ion for compound being measured

I_{S} = amount of internal standard injected, in ng (i.e., 20 ng)

V_{T} = volume of the total DCM extract (50 ml)

A_{IS} = peak area of the characteristic ion of the internal standard

RRF = relative response factor

V_{I} = volume of the extract injected (2 μ l)

M_{O} = total mass of the oil added to the flask, mg

12. Compute the "normalized concentrations" for each target analyte concentration at a given sampling time (equation 7) by simply dividing by the conserved internal marker concentration at the same sampling time.

4.6.4 Generally accepted laboratory procedures. Samples are immediately logged into the laboratory, where they will be given a

unique sample identification based on Julian data and the number logged in. Prior to the analysis of any experimental samples, a five-point standard curve is prepared. One of the mid-range standard curve concentration levels is analyzed daily before sample analysis as a continuing standard. RRFs for all target analytes should be within 25% of the standard curve response values at day 0, and at any sampling event the check standard percent difference from the initial five-point calibration must not exceed 20% between the before and after daily standard mix (see below). The collected GC/MS data are initially processed by a macro routine, which performs extracted chromatographic plots of the target compounds, integrates the target compounds, and shows integration results to include tabular numbers. The integration values are then transferred to a spreadsheet format to be quantified. Because of the complexity of the analyte matrix (oil), a very high degree of manual verification and reintegration of the spectral data is required.

4.6.5 QA/QC procedures. The reliability of this method is dependent on the QA/QC procedures followed. Before and after each analytical batch (approximately 10 samples), analyze one procedural blank, one duplicate, and one calibration verification standard (10 ng/ μ l). Analyze one reference crude oil standard. The instrument's performance and reproducibility are validated routinely in this manner. Surrogate recoveries should be within 70 to 120%, and duplicate relative percent difference values should be $\pm 20\%$. A control chart of the standard oil should be prepared and monitored. Variations of analytes in the control chart should be no more than 25% from the historical averages. Injection port discrimination for n-C25 and greater alkanes must be carefully monitored; the ratio of RRF n-C32/RRF n-C21 alkanes should not be allowed to fall below 80%. The mass discrimination can be reduced by replacing the quartz liner in the injection port after every analytical batch. The instrument's performance and reproducibility are validated routinely by analyzing the reference crude oil standard. All analyses are recorded in instrument logs detailing operating conditions, date and time, file name, etc. After analysis, the sample extracts are archived at refrigeration temperatures. To document QA/QC, the following information is contained in the detailed quantitative reports: average RRF derived from the standard curve; RRF from the daily standard; percent relative standard deviation; area of target analyte; concentration determined both on a weight and volume basis; and values for any surrogates and internal standards.

4.6.6 Instrument configuration and calibration. A 2-ml aliquot of the hexane extract prepared by the above procedure is injected into a GC/MS instrument, such as the Hewlett-Packard 5890/5971 GC/MS (recommended for use). This instrument should be equipped with a DB-5 capillary column (30 m, 0.25-mm I.D., and 0.25- μ m film thickness) and a split/splitless injection port operating in the splitless mode. Table 9 summarizes the temperature program used for the analysis. This temperature program has been optimized to give the best separation and sensitivity for analysis of the desired compounds on the instrument. Prior to the sample analysis, a five-point calibration must be conducted on a standard mix of the compounds listed in Table 7 to determine RRFs for the analyses.

Table 9.--Operating Conditions and Temperature Program of GC/MS

Operating conditions

Injector port--290 deg.C

Transfer line--320 deg.C

Total run time--73 minutes

Column flow rate (He)--1.0 ml/minute

Temperature Program

Level	Temp. 1, deg.C	Time 1, minutes	Rate, deg.C/ minute	Temp 2, deg.C	Time 2, minutes
Level 1.....	55	3	5	280	5
Level 2.....	280	0	3	310	10

4.7 Statistical analysis. The determination of a bioremediation agent's effectiveness will be partially based upon the results of a statistical analysis of the shaker flask experiment. The experimental design for this test is a two factorial design. This two-way analysis of variance (ANOVA) will be used to determine data trends. The statistical method is designed to test various types of bioremediation treatments including microbial, nutrient, enzyme, and combination products. The following is a summary of the statistical methods to be used to evaluate the analytical data obtained from all product tests. The experimental design, data analysis methodology, interpretation of results, required documentation, and a numeric example are outlined below.

4.7.1 Experimental design. The experimental design for this test is known as a factorial experiment with two factors. The first factor is product/control group; the second factor is time (measured in days). For example, if two groups (product A and a non-nutrient control) are tested at each of three points in time (day 0, 7, and 28), the experiment is called a 2x3 factorial experiment. There will be three replications (replicated shaker flasks) of each group-time combination.

4.7.2 Data analysis methods. For each analyte and each product used, a product is considered a success by the demonstration of a statistically significant difference between the mean analyte degradation by the product and the mean analyte degradation by the non-nutrient control. Such a determination will be made by performing an ANOVA on the sample data. The technical aspects of this procedure are outlined in Snedecor and Cochran (12). Most statistical software packages support the use of two-way ANOVA. However, the format required for the input data differs among the various commercial packages. Whichever package is used, the following ANOVA table will be provided as **part** of the output. In the Degree of Freedom column of Table 10, p = the number of product/control groups, t = the number of days at which each group is analyzed, and n = the number of replications. For the example of the 2x3 factorial experiment discussed above, p=2, t=3, and n=3. The significance of the F-statistics (as indicated by their corresponding p-values) are used to interpret the analysis.

Table 10.--Two-Way ANOVA Table

		Degree of		
Mean square	Source	freedom (df)	p-Value	Sum of squares
F-Statistic				
Group.....		p-1		SSG
MSG-MSG/MSE	MSG/MSE	\1\		
Time.....		t-1		SST
MST-MST/MSE	MST/MSE	\1\		
Interaction.....		(p-1)(t-1)		SSI
MSI-MSI/MSE	MSI/MSE	\1\		
Error.....		pt(n-1)		SSE
MSE-SSE				
Total.....		npt-1		SSTOT

\1\To be determined from the value of the F-statistic.

4.7.3 Interpretation. 4.7.3.1 If the F-statistic for the interaction is significant at the 0.05 level (i.e., p-value is less than 0.05), the data indicate that the mean response of at least two groups being tested differ for at least one point in time. In order to find out which groups and at which points in time the difference occurs, pairwise comparisons between the group means should be conducted for all time points. These comparisons can be made using protected least squared difference (LSD) or Dunnett mean separation techniques. The protected LSD procedure is detailed in Snedecor and Cochran (12); the Dunnett procedure is outlined in Montgomery (13). For both methods, the mean square error (MSE) from the two-way ANOVA table should be used to compute the separation values.

4.7.3.2 If the F-statistic for the interaction is not significant at the 0.05 level (i.e., p-value not less than 0.05), but the F-statistic for the group is significant (i.e., p-value is less than 0.05), the data indicate that any differences that exist among the group means are consistent across time. To find out which group means differ, a pairwise comparison of the group means should be carried out by pooling data across all points in time. Again, the MSE from the two-way ANOVA table should be used to compute the separation values.

4.7.3.3 If the F-statistic corresponding to both interaction and group are not significant at the 0.05 level, the data indicate no difference between the group means at any point in time. In this case, no further analysis is necessary.

4.7.3.4 Finally, Snedecor and Cochran (12) use caution concerning the use of multiple comparisons. If many such comparisons are being conducted, then about 5% of the tested differences will erroneously be concluded as significant. The researcher must guard against such differences causing undue attention.

4.7.4 Required documentation. 4.7.4.1 The following documents should be included to summarize the findings from a product test.

1. Data listings for each analyte that was analyzed. These should show all raw data.
2. A table of summary statistics for each analyte. The table

should include the mean, standard deviation, and sample size for each group at each day.

3. An ANOVA table for each analyte. The table should be of the same format as Table 10.

4. A clear summary of the mean separations (if mean separations were necessary). The mean separation methods (LSD or Dunnett), the significance level, the minimum significant difference value, and the significant differences should be clearly marked on each output page.

5. All computer outputs should be included. No programming alterations are necessary. The specific computer package used to analyze the data should be included in the report.

Example. An analysis of the total aromatic data (in ppm) was conducted for the following three groups:

Group 1: Non-nutrient Control

Group 2: Nutrient Control

Group 3: Test Product

4.7.4.2 The raw data are shown in Table 11. Note the three replications for each group-time combination.

Table 11.--Product Test Data, Total Aromatics (ppm)

	Group 1	Group 2	Group 3
Day 0.....	8153	7912	7711
	8299	8309	8311
	8088	8111	8200
Day 7.....	8100	7950	6900
	8078	8200	6702
	7999	8019	5987
Day 28.....	8259	8102	4000
	8111	7754	3875
	8344	7659	3100

4.7.4.3 Table 12 gives the summary statistics (number of observations, means, and standard deviations) for each group-time combination.

Table 12.--Summary Statistics for Product Test Data Total Aromatics (ppm)

Time	Product	n	Mean	Standard deviation
Day 0.....	Group 1	3	8,180.0	108.1
	Group 2	3	8,110.7	198.5
	Group 3	3	8,074.0	319.2
Day 7.....	Group 1	3	8,059.0	53.1
	Group 2	3	8,056.3	129.1
	Group 3	3	6,529.7	480.3
Day 28.....	Group 1	3	8,238.0	117.9
	Group 2	3	7,838.3	233.2
	Group 3	3	3,658.3	487.6

4.7.4.4 Table 13 shows the results of the two-way ANOVA.

Table 13.--Example Two-Way ANOVA

Table

squares	Mean square	F-Source statistic	p-value	df	Sum of
Group.....				2	
23,944,856.41	11,972,428.70	151.94	0.0001		
Time.....				2	
10,954,731.19	5,477,365.59	69.51	0.0001		
Interaction.....				4	
19,347,589.04	4,836,897.26	61.39	0.0001		
Error.....				18	
1,418,303.33	78,794.63				
Total.....				26	
55,665,480.96					

4.7.4.5 From Table 13, it can be seen that the F-statistic for interaction is significant ($F=61.39$, $p=0.0001$). This indicates that group differences exist for one or more days. Protected LSD mean separations were then conducted for each day to determine which group differences exist. The results are summarized in Table 14. Note that means with the same letter (T grouping) are not significantly different.

Table 14.--Pairwise Protected LSD Mean Separation

T grouping	Mean	n	Interaction
A.....	8,338.0	3	Group 1, Day 28.
A.....	8,180.0	3	Group 1, Day 0.
A.....	8,110.7	3	Group 2, Day 0.
A.....	8,074.0	3	Group 3, Day 0.
A.....	8,059.0	3	Group 1, Day 7.
A.....	8,056.3	3	Group 2, Day 7.
A.....	7,838.3	3	Group 2, Day 28.
B.....	6,529.7	3	Group 3, Day 7.
C.....	3,658.3	3	Group 3, Day 28.

Significant Level = 0.05.

Degrees of Freedom = 18.

Mean Square Error = 78794.63.

Critical Value = 2.10.

Least Significant Difference = 481.52.

4.7.4.6 The grouping letters indicate that the product mean values (group 3) at day 7 and day 28 are significantly different from those of both the nutrient control (group 2) and the non-nutrient control (group 1) for those days. No other significant differences are shown. Therefore, in terms of total aromatic degradation, the test indicates the desired statistically significant difference between the mean of the product and the mean of the non-nutrient control.

5.0 Bioremediation agent toxicity test [Reserved].

6.0 Summary technical product test data format.

The purpose of this format is to summarize in a standard and convenient presentation the technical product test data required by the U.S. **Environmental Protection Agency** before a product may be added to EPA's NCP Product Schedule, which may be used in carrying out the National Oil and Hazardous Substances Pollution Contingency Plan. This format, however, is not to preclude the submission of all the laboratory data used to develop the data summarized in this format. Sufficient data should be presented on both the effectiveness and toxicity tests to enable EPA to evaluate the adequacy of the summarized data. A summary of the technical product test data should be submitted in the following format. The numbered headings should be used in all submissions. The subheadings indicate the kinds of information to be supplied. The listed subheadings, however, are not exhaustive; additional relevant information should be reported where necessary. As noted, some subheadings may apply only to particular types of agents.

- I. Name, Brand, or Trademark
- II. Name, Address, and Telephone Number of Manufacturer
- III. Name, Address, and Telephone Numbers of Primary Distributors
- IV. Special Handling and Worker Precautions for Storage and Field Application
 - 1. Flammability.
 - 2. Ventilation.
 - 3. Skin and eye contact; protective clothing; treatment in case of contact.
 - 4. Maximum and minimum storage temperatures; optimum storage temperature range; temperatures of phase separations and chemical changes.
- V. Shelf Life
- VI. Recommended Application Procedure
 - 1. Application method.
 - 2. Concentration, application rate (e.g., gallons of dispersant per ton of oil).
 - 3. Conditions for use: water salinity, water temperature, types and ages of pollutants.
- VII. Toxicity (Dispersants, Surface Washing Agents, Surface Collecting Agents, and Miscellaneous Oil Spill Control Agents)

Materials Tested	Species	LC<INF>50 (ppm)
Product.....	Menidia beryllina	96-hr.
	Mysidopsis bahia 2	48-hr.
No. 2 fuel oil.....	Menidia beryllina	96-hr.
	Mysidopsis bahia	48-hr.
Product and No. 2 fuel oil (1:10).	Menidia beryllina	96-hr.
	Mysidopsis bahia	48-hr.

VIII.(a). Effectiveness (bioremediation agents). Raw data must be reported according to the format shown below. The first column lists the names of the analytes measured by GC/MS (SIM), the

surrogate standards, and various ratios and sums. In the next three columns, the concentration of the analytes (ng/mg oil), the concentration of the analytes corrected for the recovery of the surrogate standard (<greek-a>-androstandane for alkanes, d<INF>10-phenanthrene for aromatics), and the concentration of corrected analytes normalized against the conserved internal marker, respectively, are reported for the first replicate from the first sampling event. These three columns are each repeated for the next two replicates, giving 9 total columns for the product of interest. The next 9 columns are the same as the product columns except they are for the non-nutrient control. The last nine columns are for the nutrient control. Thus, a total of 28 columns are needed in the spreadsheet. This spreadsheet is for the first sampling event (day 0). Two more identical spreadsheets will be needed for each of the next two sampling events (days 7 and 28). For the statistical analysis, a report showing the two-way analysis of variance (ANOVA) table created by the software used by the investigator must be shown in its entirety along with the name of the software package used. Another printout showing the mean separation table (protected LSD test results) generated by the software must be reported. The statistical analyses are conducted using the sum of the alkane concentrations and the sum of the aromatics concentrations from the raw data table. Thus, two ANOVAs are run for each sampling event, one for total alkanes and one for total aromatics, giving a total of 6 ANOVAs for a product test (2 ANOVAs x 3 sampling events). Only if significant differences are detected by a given ANOVA will it be necessary to run a protected LSD test.

Bioremediation Agent Effectiveness Test

Raw Data

[Date:. Testing Date: 0, 7, 28 (Circle One).

Initial Oil Weight:..]

Replicate 1

Product

Replicate		Product	
Normalized to		Concentration ng/	Surrogate
marker ng/mg		mg	corrected
-----		-----	
Alkane Analyte		
.....		
n-C10.....		
.....		
n-C11.....		
.....		
n-C12.....		
.....		
n-C13.....		
.....		
n-C14.....		
.....		
n-C15.....		
.....		
n-C16.....		

.....	n-C17.....	.....
.....	pristane.....	.....
.....	n-C18.....	.....
.....	phytane.....	.....
.....	n-C19.....	.....
.....	n-C20.....	.....
.....	n-C21.....	.....
.....	n-C22.....	.....
.....	n-C23.....	.....
.....	n-C24.....	.....
.....	n-C25.....	.....
.....	n-C26.....	.....
.....	n-C27.....	.....
.....	n-C28.....	.....
.....	n-C29.....	.....
.....	n-C30.....	.....
.....	n-C31.....	.....
.....	n-C32.....	.....
.....	n-C33.....	.....
.....	n-C34.....	.....
.....	n-C35.....	.....
.....	n-C36.....	.....
.....	<greek-a>-androstane.....	.....
.....	Total alkanes.....	.....
.....	n-C17:pristane.....	.....
.....	n-C18:phytane.....	.....
Aromatic Analyte:		.....
.....	naphthalene.....	.....
.....	C1-naphthalenes.....	.....
.....	C2-naphthalenes.....	.....

.....
C3-naphthalenes.....	.....
.....
C4-naphthalenes.....	.....
.....
dibenzothiophene.....	.....
.....
fluorene.....	.....
.....
C1-fluorenes.....	.....
.....
C2-fluorenes.....	.....
.....
C3-fluorenes.....	.....
.....
C1-dibenzothiophenes.....	.....
.....
C2-dibenzothiophenes.....	.....
.....
C3-dibenzothiophenes.....	.....
.....
phenanthrene.....	.....
.....
anthracene.....	.....
.....
C1-phenanthrenes.....	.....
.....
C2-phenanthrenes.....	.....
.....
C3-phenanthrenes.....	.....
.....
naphthobenzothio.....	.....
.....
C1-naphthobenzothio.....	.....
.....
C2-naphthobenzothio.....	.....
.....
C3-naphthobenzothio.....	.....
.....
fluoranthene.....	.....
.....
pyrene.....	.....
.....
C1-pyrenes.....	.....
.....
C1-pyrenes.....	.....
.....
chrysene.....	.....
.....
benzo (a) anthracene.....	.....
.....
C1-chrysenes.....	.....
.....
c2-chrysenes.....	.....
.....
benzo (b) fluoranth.....	.....
.....
benzo (k) fluoranth.....	.....
.....
benzo (e) pyrene.....	.....

.....	benzo (a) pyrene.....	.....
.....	perylene.....	.....
.....	indeno (1,2,3-cd) per.....	.....
.....	benzo (g,h,i) pyrene.....	.....
.....	dibenz (ah) anthrac.....	.....
.....	<greek-a>, <greek-b>-hopane.....	.....
.....	d8-naphthalene.....	.....
.....	d10-phenanthrene.....	.....
.....	d12-chrysene.....	.....
.....	d12-perylene.....	.....
.....	Total aromatics.....	.....
.....	Grav. weight oil.....	.....
.....	No. oil degraders/ml.....	.....

VIII.(b). Toxicity (Bioremediation Agents) [Reserved]
 IX. Microbiological Analysis (Bioremediation Agents)
 X. Physical Properties of Dispersant/Surface Washing Agent/
 Surface Collecting Agent/Miscellaneous Oil Spill Control Agent:
 1. Flash Point: (deg.F)
 2. Pour Point: (deg.F)
 3. Viscosity: _____ at _____ deg.F (furol seconds)
 4. Specific Gravity: _____ at _____ deg.F
 5. pH: (10% solution if hydrocarbon based)
 6. Surface Active Agents (Dispersants and Surface Washing
 Agents)\2\

\2\If the submitter claims that the information presented under
 this subheading is confidential, this information should be
 submitted on a separate sheet of paper clearly labeled according to
 the subheading and entitled ``Confidential Information.''

7. Solvents (Dispersants and Surface Washing Agents)\2\
 8. Additives (Dispersants and Surface Washing Agents)
 9. Solubility (Surface Collecting Agents)
 XI. Analysis for Heavy Metals, Chlorinated Hydrocarbons, and
 Cyanide (Dispersants, Surface Washing Agents, Surface Collecting
 Agents, and Miscellaneous Oil Spill Control Agents):

Compounds	Concentration (ppm)
Arsenic.....
Cadmium.....
Chromium.....
Copper.....
Lead.....
Mercury.....
Nickel.....
Zinc.....
Cyanide.....
Chlorinated Hydrocarbons.....

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13. Appendix E to **part 300** is added to read as follows:

Appendix E To **Part 300**

Oil Spill Response

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1.0 Introduction.

1.1 Background. The Oil Pollution Act of 1990 (OPA) amends the Federal Water Pollution Control Act (FWPCA), commonly referred to as the Clean Water Act (CWA), to require the revision of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). In revising the NCP, the need to separate the response requirements for oil discharges and release of hazardous substances, pollutants, and contaminants became evident.

1.2 Purpose/objective. This document compiles general oil discharge response requirements into one appendix to aid participants and responders under the national response system (NRS). This appendix provides the organizational structure and procedures to prepare for and respond to oil discharges. Nothing in this appendix alters the meaning or policy stated in other sections or subparts of the NCP.

1.3 Scope.

(a) This appendix applies to discharges of oil into or upon the navigable waters of the United States and adjoining shorelines, the waters of the contiguous zone, or waters of the exclusive economic zone, or which may affect the natural resources belonging to, appertaining to, or under the exclusive management authority of the United States.

(b) This appendix is designed to facilitate efficient, coordinated, and effective response to discharges of oil in accordance with the authorities of the CWA. It addresses:

(1) The national response organization that may be activated in response actions, the responsibilities among the federal, state, and local governments, and the resources that are available for response.

(2) The establishment of regional and area contingency plans.

(3) Procedures for undertaking removal actions pursuant to section 311 of the CWA.

(4) Listing of federal trustees for natural resources for purposes of the CWA.

(5) Procedures for the participation of other persons in response actions.

(6) Procedures for compiling and making available cost documentation for response actions.

(7) National procedures for the use of dispersants and other chemicals in removals under the CWA.

(c) In implementing the NCP provisions compiled in this appendix, consideration shall be given to international assistance plans and agreements, security regulations and responsibilities based on international agreements, federal statutes, and executive orders. Actions taken pursuant to the provisions of any applicable international joint contingency plans shall be consistent with the NCP to the greatest extent possible. The Department of State shall be consulted, as appropriate, prior to taking action that may affect its activities.

1.4 Abbreviations. This section of the appendix provides abbreviations relating to oil.

(a) Department and **Agency** Title Abbreviations:

ATSDR--**Agency** for Toxic Substances and Disease Registry

CDC--Centers for Disease Control

DOC--Department of Commerce

DOD--Department of Defense

DOE--Department of Energy

DOI--Department of Interior

DOJ--Department of Justice

DOL--Department of Labor

DOS--Department of State

DOT--Department of Transportation

EPA--**Environmental Protection Agency**

FEMA--Federal Emergency Management **Agency**

GSA--General Services Administration

HHS--Department of Health and Human Services

NIOSH--National Institute for Occupational Safety and Health

NOAA--National Oceanic and Atmospheric Administration

OSHA--Occupational Safety and Health Administration

RSPA--Research and Special Programs Administration

USCG--United States Coast Guard

USDA--United States Department of Agriculture

Note: Reference is made in the NCP to both the Nuclear Regulatory Commission and the National Response Center. In order to avoid confusion, the NCP will spell out Nuclear Regulatory Commission and use the abbreviation ``NRC'' only with respect to the National Response Center.

(b) Operational Abbreviations:

AC--Area Committee
 ACP--Area Contingency Plan
 DRAT--District Response Advisory Team
 DRG--District Response Group
 ERT--**Environmental** Response Team
 ESF--Emergency Support Functions
 FCO--Federal Coordinating Officer
 FRERP--Federal Radiological Emergency Response Plan
 FRP--Federal Response Plan
 LEPC--Local Emergency Planning Committee
 NCP--National Contingency Plan
 NPFC--National Pollution Funds Center
 NRC--National Response Center
 NRS--National Response System
 NRT--National Response Team
 NSF--National Strike Force
 NSFCC--National Strike Force Coordination Center
 OSC--On-Scene Coordinator
 OSLTF--Oil Spill Liability Trust Fund
 POLREP--Pollution Report
 PIAT--Public Information Assist Team
 RCP--Regional Contingency Plan
 RERT--Radiological Emergency Response Team
 RRT--Regional Response Team
 SERC--State Emergency Response Commission
 SONS--Spill of National Significance
 SSC--Scientific Support Coordinator
 SUPSALV--United States Navy Supervisor of Salvage
 USFWS--United States Fish and Wildlife Service

1.5 Definitions. Terms not defined in this section have the meaning given by CERCLA, the OPA, or the CWA. This appendix restates the NCP definitions relating to oil.

Activation means notification by telephone or other expeditious manner or, when required, the assembly of some or all appropriate members of the RRT or NRT.

Area Committee (AC) as provided for by CWA sections 311(a)(18) and (j)(4), means the entity appointed by the President consisting of members from qualified personnel of federal, state, and local agencies with responsibilities that include preparing an area contingency plan for an area designated by the President.

Area contingency plan (ACP) as defined by CWA sections 311(a)(19) and (j)(4) means the plan prepared by an Area Committee that is developed to be implemented in conjunction with the NCP and RCP, in **part** to address removal of a worst case discharge and to mitigate or prevent a substantial threat of such a discharge from a vessel, offshore facility, or onshore facility operating in or near an area designated by the President.

Bioremediation agents means microbiological cultures, enzyme additives, or nutrient additives that are deliberately introduced into an oil discharge and that will significantly increase the rate of biodegradation to mitigate the effects of the discharge.

Burning agents means those additives that, through physical or chemical means, improve the combustibility of the materials to which they are applied.

CERCLA is the Comprehensive **Environmental** Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986.

Chemical agents means those elements, compounds, or mixtures

that coagulate, disperse, dissolve, emulsify, foam, neutralize, precipitate, reduce, solubilize, oxidize, concentrate, congeal, entrap, fix, make the pollutant mass more rigid or viscous, or otherwise facilitate the mitigation of deleterious effects or the removal of the oil pollutant from the water. Chemical agents include biological additives, dispersants, sinking agents, miscellaneous oil spill control agents, and burning agents, but do not include solvents.

Claim in the case of a discharge under CWA means a request, made in writing for a sum certain, for compensation for damages or removal costs resulting from an incident.

Claimant as defined by section 1001 of the OPA means any person or government who presents a claim for compensation under Title I of the OPA.

Clean natural seawater means that the source of this seawater must not be heavily contaminated with industrial or other types of effluent.

Coastal waters for the purpose of classifying the size of discharges, means the waters of the coastal zone except for the Great Lakes and specified ports and harbors on inland rivers.

Coastal zone as defined for the purpose of the NCP, means all United States waters subject to the tide, United States waters of the Great Lakes, specified ports and harbors on inland rivers, waters of the contiguous zone, other waters of the high seas subject to the NCP, and the land surface or land substrata, ground waters, and ambient air proximal to those waters. The term coastal zone delineates an area of federal responsibility for response action. Precise boundaries are determined by EPA/USCG agreements and identified in federal regional contingency plans.

Coast Guard District Response Group (DRG) as provided for by CWA sections 311(a)(20) and (j)(3), means the entity established by the Secretary of the department in which the USCG is operating within each USCG district and shall consist of: the combined USCG personnel and equipment, including firefighting equipment, of each port within the district; additional prepositioned response equipment; and a district response advisory team.

Contiguous zone means the zone of the high seas, established by the United States under Article 24 of the Convention on the Territorial Sea and Contiguous Zone, which is contiguous to the territorial sea and which extends nine miles seaward from the outer limit of the territorial sea.

Damages as defined by section 1001 of the OPA means damages specified in section 1002(b) of the Act, and includes the cost of assessing these damages.

Discharge as defined by section 311(a)(2) of the CWA, includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil, but excludes discharges in compliance with a permit under section 402 of the CWA, discharges resulting from circumstances identified and reviewed and made a **part** of the public record with respect to a permit issued or modified under section 402 of the CWA, and subject to a condition in such permit, or continuous or anticipated intermittent discharges from a point source, identified in a permit or permit application under section 402 of the CWA, that are caused by events occurring within the scope of relevant operating or treatment systems. For purposes of the NCP, discharge also means substantial threat of discharge.

Dispersants means those chemical agents that emulsify, disperse, or solubilize oil into the water column or promote the surface spreading of oil slicks to facilitate dispersal of the oil into the

water column.

Exclusive economic zone as defined in OPA section 1001, means the zone established by Presidential Proclamation Numbered 5030, dated March 10, 1983, including the ocean waters of the areas referred to as ``eastern special areas'' in Article 3(1) of the Agreement between the United States of America and the Union of Soviet Socialist Republics on the Maritime Boundary, signed June 1, 1990.

Facility as defined by section 1001 of the OPA means any structure, group of structures, equipment, or device (other than a vessel) which is used for one or more of the following purposes: exploring for, drilling for, producing, storing, handling, transferring, processing, or transporting oil. This term includes any motor vehicle, rolling stock, or pipeline used for one or more of these purposes.

Federal Response Plan (FRP) means the agreement signed by 25 federal departments and agencies in April 1987 and developed under the authorities of the Earthquake Hazards Reduction Act of 1977 and the Disaster Relief Act of 1974, as amended by the Stafford Disaster Relief Act of 1988.

First federal official means the first federal representative of a participating **agency** of the National Response Team to arrive at the scene of a discharge or a release. This official coordinates activities under the NCP and may initiate, in consultation with the OSC, any necessary actions until the arrival of the predesignated OSC.

Indian tribe as defined in OPA section 1001, means any Indian tribe, band, nation, or other organized group or community, but not including any Alaska Native regional or village corporation, which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians and has governmental authority over lands belonging to or controlled by the Tribe.

Inland waters for the purposes of classifying the size of discharges, means those waters of the United States in the inland zone, waters of the Great Lakes, and specified ports and harbors on inland rivers.

Inland zone means the environment inland of the coastal zone excluding the Great Lakes, and specified ports and harbors on inland rivers. The term inland zone delineates an area of federal responsibility for response action. Precise boundaries are determined by EPA/USCG agreements and identified in federal regional contingency plans.

Lead administrative trustee means a natural resource trustee who is designated on an incident-by-incident basis for the purpose of preassessment and damage assessment and chosen by the other trustees whose natural resources are affected by the incident. The lead administrative trustee facilitates effective and efficient communication during response operations between the OSC and the other natural resource trustees conducting activities associated with damage assessment and is responsible for applying to the OSC for access to response operations resources on behalf of all trustees for initiation of damage assessment.

Lead **agency** means the **agency** that provides the OSC to plan and implement response actions under the NCP.

Miscellaneous oil spill control agent is any product, other than a dispersant, sinking agent, surface washing agent, surface collecting agent, bioremediation agent, burning agent, or sorbent that can be used to enhance oil spill cleanup, removal, treatment,

or mitigation.

National Pollution Funds Center (NPFC) means the entity established by the Secretary of Transportation whose function is the administration of the Oil Spill Liability Trust Fund (OSLTF). Among the NPFC's duties are: providing appropriate access to the OSLTF for federal agencies and states for removal actions and for federal trustees to initiate the assessment of natural resource damages; providing appropriate access to the OSLTF for claims; and coordinating cost recovery efforts.

National Response System (NRS) is the mechanism for coordinating response actions by all levels of government in support of the OSC. The NRS is composed of the NRT, RRTs, OSC, Area Committees, and Special Teams and related support entities.

National Strike Force (NSF) is a special team established by the USCG, including the three USCG Strike Teams, the Public Information Assist Team (PIAT), and the National Strike Force Coordination Center. The NSF is available to assist OSCs in their preparedness and response duties.

National Strike Force Coordination Center (NSFCC), authorized as the National Response Unit by CWA section 311(a)(23) and (j)(2), means the entity established by the Secretary of the department in which the USCG is operating at Elizabeth City, North Carolina, with responsibilities that include administration of the USCG Strike Teams, maintenance of response equipment inventories and logistic networks, and conducting a national exercise program.

Natural resources means land, fish, wildlife, biota, air, water, groundwater, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the United States (including the resources of the exclusive economic zone defined by the Magnuson Fishery Conservation and Management Act of 1976), any state or local government, any foreign government, any Indian tribe, or, if such resources are subject to a trust restriction on alienation, any member of an Indian tribe.

Navigable waters as defined by **40 CFR** 110.1 means the waters of the United States, including the territorial seas. The term includes:

(a) All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;

(b) Interstate waters, including interstate wetlands;

(c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, and wetlands, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

(1) That are or could be used by interstate or foreign travelers for recreational or other purposes;

(2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; and

(3) That are used or could be used for industrial purposes by industries in interstate commerce.

(d) All impoundments of waters otherwise defined as navigable waters under this section;

(e) Tributaries of waters identified in paragraphs (a) through

(d) of this definition, including adjacent wetlands; and

(f) Wetlands adjacent to waters identified in paragraphs (a) through (e) of this definition: Provided, that waste treatment systems (other than cooling ponds meeting the criteria of this

paragraph) are not waters of the United States.

(g) Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal **agency**, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

Offshore facility as defined by section 311(a)(11) of the CWA means any facility of any kind located in, on, or under any of the navigable waters of the United States, and any facility of any kind which is subject to the jurisdiction of the United States and is located in, on, or under any other waters, other than a vessel or a public vessel.

Oil as defined by section 311(a)(1) of the CWA means oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil. Oil, as defined by section 1001 of the OPA means oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil, but does not include petroleum, including crude oil or any fraction thereof, which is specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of section 101(14) of the Comprehensive **Environmental** Response, Compensation, and Liability Act (42 U.S.C. 9601) and which is subject to the provisions of that Act.

Oil Spill Liability Trust Fund means the fund established under section 9509 of the Internal Revenue Code of 1986 (26 U.S.C. 9509).

On-scene coordinator (OSC) means the federal official predesignated by the EPA or the USCG to coordinate and direct response under subpart D.

Onshore facility as defined by section 311(a)(10) of the CWA, means any facility (including, but not limited to, motor vehicles and rolling stock) of any kind located in, on, or under any land within the United States other than submerged land.

On-site means the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of a response action.

Person as defined by section 1001 of the OPA, means an individual, corporation, partnership, association, state, municipality, commission, or political subdivision of a state, or any interstate body.

Public vessel as defined by section 311(a)(4) of the CWA, means a vessel owned or bareboat-chartered and operated by the United States, or by a state or political subdivision thereof, or by a foreign nation, except when such vessel is engaged in commerce.

Remove or removal as defined by section 311(a)(8) of the CWA, refers to containment and removal of oil or hazardous substances from the water and shorelines or the taking of such other actions as may be necessary to minimize or mitigate damage to the public health or welfare (including, but not limited to, fish, shellfish, wildlife, public and private property, and shorelines and beaches) or to the environment. For the purpose of the NCP, the term also includes monitoring of action to remove a discharge.

Removal costs as defined by section 1001 of the OPA means the costs of removal that are incurred after a discharge of oil has occurred, or in any case in which there is a substantial threat of a discharge of oil the costs to prevent, minimize, or mitigate oil pollution from such an incident.

Responsible party as defined by section 1001 of the OPA means the following:

(a) Vessels--In the case of a vessel, any person owning, operating, or demise chartering the vessel.

(b) Onshore Facilities--In the case of an onshore facility (other than a pipeline), any person owning or operating the facility, except a federal **agency**, state, municipality, commission, or political subdivision of a state, or any interstate body, that as the owner transfers possession and right to use the property to another person by lease, assignment, or permit.

(c) Offshore Facilities--In the case of an offshore facility (other than a pipeline or a deepwater port licensed under the Deepwater Port Act of 1974 (33 U.S.C. 1501 et seq.)), the lessee or permittee of the area in which the facility is located or the holder of a right of use and easement granted under applicable state law or the Outer Continental Shelf Lands Act (43 U.S.C. 1301-1356) for the area in which the facility is located (if the holder is a different person than the lessee or permittee), except a federal **agency**, state, municipality, commission, or political subdivision of a state, or any interstate body, that as owner transfers possession and right to use the property to another person by lease, assignment, or permit.

(d) Deepwater Ports--In the case of a deepwater port licensed under the Deepwater Port Act of 1974 (33 U.S.C. 1501-1524), the licensee.

(e) Pipelines--In the case of a pipeline, any person owning or operating the pipeline.

(f) Abandonment--In the case of an abandoned vessel, onshore facility, deepwater port, pipeline, or offshore facility, the person who would have been responsible parties immediately prior to the abandonment of the vessel or facility.

Sinking agents means those additives applied to oil discharges to sink floating pollutants below the water surface.

Size classes of discharges refers to the following size classes of oil discharges which are provided as guidance to the OSC and serve as the criteria for the actions delineated in subpart D. They are not meant to imply associated degrees of hazard to public health or welfare, nor are they a measure of **environmental** injury. Any oil discharge that poses a substantial threat to public health or welfare or the environment or results in significant public concern shall be classified as a major discharge regardless of the following quantitative measures:

(a) Minor discharge means a discharge in inland waters of less than 1,000 gallons of oil or a discharge to the coastal waters of less than 10,000 gallons of oil.

(b) Medium discharge means a discharge of 1,000 to 10,000 gallons of oil to the inland waters or a discharge of 10,000 to 100,000 gallons of oil to the coastal waters.

(c) Major discharge means a discharge of more than 10,000 gallons of oil to the inland waters or more than 100,000 gallons of oil to the coastal waters.

Sorbents means essentially inert and insoluble materials that are used to remove oil and hazardous substances from water through adsorption, in which the oil or hazardous substance is attracted to the sorbent surface and then adheres to it, absorption, in which the oil or hazardous substance penetrates the pores of the sorbent material, or a combination of the two. Sorbents are generally manufactured in particulate form for spreading over an oil slick or as sheets, rolls, pillows, or booms. The sorbent material may consist of, but is not limited to, the following materials:

(a) Organic products--

- (1) Peat moss or straw;
- (2) Cellulose fibers or cork;
- (3) Corn cobs;
- (4) Chicken or duck feathers.
- (b) Mineral compounds--
 - (1) Volcanic ash or perlite;
 - (2) Vermiculite or zeolite.
- (c) Synthetic products--
 - (1) Polypropylene;
 - (2) Polyethylene;
 - (3) Polyurethane;
 - (4) Polyester.

Specified ports and harbors means those ports and harbor areas on inland rivers, and land areas immediately adjacent to those waters, where the USCG acts as predesignated on-scene coordinator. Precise locations are determined by EPA/USCG regional agreements and identified in federal regional contingency plans and area contingency plans.

Spill of national significance (SONS) means a spill which due to its severity, size, location, actual or potential impact on the public health and welfare or the environment, or the necessary response effort, is so complex that it requires extraordinary coordination of federal, state, local, and responsible party resources to contain and cleanup the discharge.

State means the several states of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the U.S. Virgin Islands, the Commonwealth of the Northern Marianas, and any other territory or possession over which the United States has jurisdiction. For purposes of the NCP, the term includes Indian tribes as defined in the NCP except where specifically noted.

Surface collecting agents means those chemical agents that form a surface film to control the layer thickness of oil.

Surface washing agent is any product that removes oil from solid surfaces, such as beaches and rocks, through a detergency mechanism and does not involve dispersing or solubilizing the oil into the water column.

Tank vessel as defined by section 1001 of OPA means a vessel that is constructed or adapted to carry, or that carries, oil or hazardous material in bulk as cargo or cargo residue, and that: (1) is a vessel of the United States; (2) operates on the navigable waters; or (3) transfers oil or hazardous material in a place subject to the jurisdiction of the United States.

Threat of discharge, see definition for discharge.

Trustee means an official of a federal natural resources management **agency** designated in subpart G of the NCP or a designated state official or Indian tribe or, in the case of discharges covered by the OPA, a foreign government official, who may pursue claims for damages under section 1006 of the OPA.

United States when used in relation to section 311(a)(5) of the CWA, mean the states, the District of Columbia, the Commonwealth of Puerto Rico, the Northern Mariana Islands, Guam, American Samoa, the U.S. Virgin Islands, and the Pacific Island Governments.

Vessel as defined by section 311(a)(3) of the CWA means every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water other than a public vessel.

Volunteer means any individual accepted to perform services by the lead **agency** which has authority to accept volunteer services

(for examples, see 16 U.S.C. 742f(c)). A volunteer is subject to the provisions of the authorizing statute and the NCP.

Worst case discharge as defined by section 311(a)(24) of the CWA means, in the case of a vessel, a discharge in adverse weather conditions of its entire cargo, and in the case of an offshore facility or onshore facility, the largest foreseeable discharge in adverse weather conditions.

2.0 National response system.

2.1 Overview. The national response system (NRS) is the mechanism for coordinating response actions by all levels of government in support of the OSC. The NRS is composed of the National Response Team (NRT), Regional Response Teams (RRTs), On-scene coordinator (OSC), Area Committees, and Special Teams and related support entities. The NRS functions as an incident command system (ICS) under the direction of the OSC. Typical of an ICS, the NRS is capable of expanding or contracting to accommodate the response effort required by the size or complexity of the discharge.

2.2 Priorities. (a) Safety of human life must be given the highest priority during every response action. This includes any search and rescue efforts in the general proximity of the discharge and the insurance of safety of response personnel.

(b) Stabilizing the situation to preclude the event from worsening is the next priority. All efforts must be focused on saving a vessel that has been involved in a grounding, collision, fire or explosion, so that it does not compound the problem. Comparable measures should be taken to stabilize a situation involving a facility, pipeline, or other source of pollution. Stabilizing the situation includes securing the source of the spill and/or removing the remaining oil from the container (vessel, tank, or pipeline) to prevent additional oil spillage, to reduce the need for follow-up response action, and to minimize adverse impact to the environment.

(c) The response must use all necessary containment and removal tactics in a coordinated manner to ensure a timely, effective response that minimizes adverse impact to the environment.

(d) All parts of this national response strategy should be addressed concurrently, but safety and stabilization are the highest priorities. The OSC should not delay containment and removal decisions unnecessarily and should take actions to minimize adverse impact to the environment that begins as soon as a discharge occurs, as well as actions to minimize further adverse **environmental** impact from additional discharges.

(e) The priorities set forth in this section are broad in nature, and should not be interpreted to preclude the consideration of other priorities that may arise on a site-specific basis.

2.3 Responsibility. (a) The predesignated OSC has the responsibility to direct response actions and coordinate all other response efforts at the scene of an oil discharge or threatened discharge. The OSC monitors or directs all federal, state, local, and private removal actions, or arranges for the removal of an actual or threatened oil discharge, removing and if necessary, requesting authority to destroy a vessel. Additionally, the CWA requires the OSC to direct all federal, state, local, and private removal actions to any incident that poses a substantial threat to the public health or welfare.

(b) Cleanup responsibility for an oil discharge immediately falls on the responsible party, unless the discharge poses a

substantial threat to public health or welfare. In a large percentage of oil discharges, the responsible party shall conduct the cleanup. If the responsible party does conduct the removal, the OSC shall ensure adequate surveillance over whatever actions are initiated.

(1) If effective actions are not being taken to eliminate the threat, or if removal is not being properly done, the OSC should, to the extent practicable under the circumstances, so advise the responsible party. If the responsible party does not respond properly, the OSC shall take appropriate response actions and should notify the responsible party of the potential liability for federal response costs incurred by the OSC pursuant to the OPA and CWA. Where practicable, continuing efforts should be made to encourage response by responsible parties.

(2) If the Administrator of EPA or the Secretary of the department in which the USCG is operating determines that there may be an imminent and substantial threat to the public health or welfare or the environment of the United States (including fish, shellfish, and wildlife, public and private property, shorelines, beaches, habitats, and other living and nonliving natural resources under the jurisdiction or control of the United States, because of an actual or threatened discharge of oil from any vessel or offshore or onshore facility into or upon the navigable waters of the United States), the Administrator or Secretary may request the U.S. Attorney General to secure the relief from any person, including the owner or operator of the vessel or facility necessary to abate a threat or, after notice to the affected state, take any other action authorized by section 311 of the CWA including administrative orders, that may be necessary to protect the public health or welfare.

(3) The responsible party is liable for costs of federal removal and damages in accordance with section 311(f) of the CWA, section 1002 of the OPA, and other federal laws.

(c) In those incidents where a discharge or threat of discharge poses a substantial threat to the public health or welfare of the United States, the OSC shall direct all federal, state, or private actions to remove the discharge or to mitigate or prevent the threat of such a discharge, as appropriate. The OSC shall also request immediate activation of the RRT.

(d) During responses to any discharge the OSC may request advice or support from the Special Teams and any local support units identified by the Area Committee. Examples include scientific advice from the Scientific Support Coordinator (SSC), technical guidance or prepositioned equipment from the District Response Group (DRG), or public information assistance from the National Strike Force (NSF).

(e) When an oil discharge exceeds the response capability of the region in which it occurs, transects regional boundaries, or involves a substantial threat to the public health or welfare, substantial amounts of property, or substantial threats to the natural resources, the NRT should be activated as an emergency response team. If appropriate the RRT Chairman may contact the NRT Chairman and request the NRT activation.

3.0 Components of national response system and responsibilities.

The NRS is the mechanism for coordinating response actions by all levels of government in support of the OSC. The NRS organization is divided into national, regional, and area levels. The national level comprises the NRT, the National Strike Force Coordination Center (NSFCC), and the National Response Center (NRC). The regional

level is comprised of the RRT. The area level is made up of the OSC, Special Teams, and Area Committees. The basic framework for the response management structure is a system (e.g., a unified command system), that brings together the functions of the federal government, the state government, and the responsible party to achieve an effective and efficient response, where the OSC retains authority.

3.1 National.

3.1.1 National response team. (a) National planning and coordination is accomplished through the NRT. The NRT consists of representatives from the USCG, EPA, Federal Emergency Management **Agency** (FEMA), Department of Defense (DOD), Department of Energy (DOE), Department of Agriculture (DOA), Department of Commerce (DOC), Department of Health and Human Services (HHS), Department of the Interior (DOI), Department of Justice (DOJ), Department of Labor (DOL), Department of Transportation (DOT), Department of State (DOS), Nuclear Regulatory Commission, and General Services Administration (GSA). Each **agency** shall designate a member to the team and sufficient alternates to ensure representation, as **agency** resources permit. The NRT will consider requests for membership on the NRT from other agencies. Other agencies may request membership by forwarding such requests to the chair of the NRT (see PFigure 1).

(b) The chair of the NRT shall be the representative of the EPA and the vice chair shall be the representative of the USCG, with the exception of periods of activation because of response action. During activation, the chair shall be the member **agency** providing the OSC. The vice chair shall maintain records of NRT activities along with national, regional, and area plans for response actions.

(c) While the NRT desires to achieve a consensus on all matters brought before it, certain matters may prove unresolvable by this means. In such cases, each **agency** serving as a participating **agency** on the NRT may be accorded one vote in NRT proceedings.

(d) The NRT may establish such bylaws, procedures, and committees as it deems appropriate to further the purposes for which it is established.

(e) The NRT shall evaluate methods of responding to discharges, shall recommend any changes needed in the response organization, and shall recommend to the Administrator of EPA changes to the NCP designed to improve the effectiveness of the national response system, including drafting of regulatory language.

(f) The NRT shall provide policy and program direction to the RRTs.

(g) The NRT may consider and make recommendations to appropriate agencies on the training, equipping, and **protection** of response teams and necessary research, development, demonstration, and evaluation to improve response capabilities.

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(h) Direct planning and preparedness responsibilities of the NRT include:

(1) Maintaining national preparedness to respond to a major discharge of oil that is beyond regional capabilities;

(2) Monitoring incoming reports from all RRTs and activating for a response action, when necessary;

(3) Coordinating a national program to assist member agencies in preparedness planning and response, and enhancing coordination of member **agency** preparedness programs;

(4) Developing procedures, in coordination with the NSFCC, as appropriate, to ensure the coordination of federal, state, and local governments, and private response to oil discharges;

(5) Monitoring response-related research and development, testing, and evaluation activities of NRT agencies to enhance coordination, avoid duplication of effort, and facilitate research in support of response activities;

(6) Developing recommendations for response training and for enhancing the coordination of available resources among agencies with training responsibilities under the NCP;

(7) Reviewing regional responses to oil discharges, including an evaluation of equipment readiness and coordination among responsible public agencies and private organizations; and

(8) Assisting in developing a national exercise program, in coordination with the NSFCC to ensure preparedness and coordination nationwide.

(i) The NRT shall consider matters referred to it for advice or resolution by an RRT.

(j) The NRT should be activated as an emergency response team:

(1) When an oil discharge:

(A) Exceeds the response capability of the region in which it occurs;

(B) Transects regional boundaries; or

(C) Involves a substantial threat to the public health or welfare, substantial amounts of property, or substantial threats to natural resources;

(2) If requested by any NRT member.

(k) When activated for a response action, the NRT will meet at the call of the chair and may:

(1) Monitor and evaluate reports from the OSC and recommend to the OSC, through the RRT, actions to combat the discharge;

(2) Request other federal, state and local governments, or private agencies, to provide resources under their existing authorities to combat a discharge, or to monitor response operations; and

(3) Coordinate the supply of equipment, personnel, or technical advice to the affected region from other regions or districts.

3.1.2 National response center. (a) The NRC, located at USCG Headquarters, is the national communications center, continuously manned for handling activities related to response actions, including those involving discharges of oil. The NRC acts as the single point of contact for all pollution incident reporting, and as the NRT communications center. Notice of discharges must be made by telephone through a toll free number or a special number (Telecommunication Device for the Deaf (TDD) and collect calls accepted). Upon receipt of a notification of discharge, the NRC shall promptly notify the OSC. The telephone report is distributed to any interested NRT member **agency** or federal entity that has established a written agreement or understanding with the NRC.

(b) The Commandant, USCG, in conjunction with other NRT agencies, provides the necessary personnel, communications, plotting facilities, and equipment for the NRC.

(c) Notice of an oil discharge in an amount equal to or greater than the reportable quantity must be made immediately in accordance

with 33 **CFR part** 153, subpart B. Notification will be made to the NRC Duty Officer, HQ USCG, Washington, DC, telephone (800) 424-8802 or (202) 267-2675. All notices of discharges received at the NRC will be relayed immediately by telephone to the OSC.

3.1.3 National strike force coordination center. NSFCC, located in Elizabeth City, North Carolina, may assist the OSC by providing information on available spill removal resources, personnel, and equipment. The NSFCC can provide the following support to the OSC:

- (a) Technical assistance, equipment, and other resources to augment the OSC staff during spill response;
- (b) Assistance in coordinating the use of private and public resources in support of the OSC during a response to or a threat of a worst case discharge of oil;
- (c) Review of the area contingency plan, including an evaluation of equipment readiness and coordination among responsible public agencies and private organizations;
- (d) Assistance in locating spill response resources for both response and planning, using the NSFCC's national and international computerized inventory of spill response resources;
- (e) Coordination and evaluation of pollution response exercises; and
- (f) Inspection of district prepositioned pollution response equipment.

3.2 Regional. (a) Regional planning and coordination of preparedness and response actions is accomplished through the RRT. In the case of a discharge of oil, preparedness activities shall be carried out in conjunction with Area Committees as appropriate. The RRT **agency** membership parallels that of the NRT, but also includes state and local representation. The RRT provides: (1) the appropriate regional mechanism for development and coordination of preparedness activities before a response action is taken and for coordination of assistance and advice to the OSC during such response actions; and (2) guidance to Area Committees, as appropriate, to ensure inter-area consistency and consistency of individual ACPs with the RCP and NCP.

(b) The two principal components of the RRT mechanism are a standing team, which consists of designated representatives from each participating federal **agency**, state governments, and local governments (as agreed upon by the states); and incident-specific teams formed from the standing team when the RRT is activated for a response. On incident-specific teams, participation by the RRT member agencies will relate to the technical nature of the incident and its geographic location.

(1) The standing team's jurisdiction corresponds to the standard federal regions, except for Alaska, Oceania in the Pacific, and the Caribbean area, each of which has a separate standing RRT. The role of the standing RRT includes communications systems and procedures, planning, coordination, training, evaluation, preparedness, and related matters on a regionwide basis. It also includes coordination of Area Committees for these functions in areas within their respective regions, as appropriate.

(2) The role of the incident-specific team is determined by the operational requirements of the response to a specific discharge. Appropriate levels of activation and/or notification of the incident-specific RRT, including participation by state and local governments, shall be determined by the designated RRT chair for the incident, based on the RCP. The incident-specific RRT supports the designated OSC. The designated OSC manages response efforts and coordinates all other efforts at the scene of a discharge.

(c) The representatives of EPA and the USCG shall act as co-chairs of the RRTs except when the RRT is activated. When the RRT is activated for response actions, the chair is the member **agency** providing the OSC.

(d) Each participating **agency** should designate one member and at least one alternate member to the RRT. Agencies whose regional subdivisions do not correspond to the standard federal regions may designate additional representatives to the standing RRT to ensure appropriate coverage of the standard federal region. Participating states may also designate one member and at least one alternate member to the RRT. Indian tribal governments may arrange with the RRT for representation appropriate to their geographical location. All agencies and states may also provide additional representatives as observers to meetings of the RRT.

(e) RRT members should designate representatives and alternates from their agencies as resource personnel for RRT activities, including RRT work planning, and membership on incident-specific teams in support of the OSCs.

(f) Federal RRT members or their representatives should provide OSCs with assistance from their respective federal agencies commensurate with **agency** responsibilities, resources, and capabilities within the region. During a response action, the members of the RRT should seek to make available the resources of their agencies to the OSC as specified in the RCP and ACP.

(g) RRT members should nominate appropriately qualified representatives from their agencies to work with OSCs in developing and maintaining ACPs.

(h) Affected states are encouraged to participate actively in all RRT activities. Each state Governor is requested to assign an office or **agency** to represent the state on the appropriate RRT; to designate representatives to work with the RRT in developing RCPs; to plan for, make available, and coordinate state resources for use in response actions; and to serve as the contact point for coordination of response with local government agencies, whether or not represented on the RRT. The state's RRT representative should keep the State Emergency Response Commission (SERC) apprised of RRT activities and coordinate RRT activities with the SERC. Local governments are invited to participate in activities on the appropriate RRT as provided by state law or as arranged by the state's representative. Indian tribes are also invited to participate in such activities.

(i) The standing RRT shall recommend changes in the regional response organization as needed, revise the RCP as needed, evaluate the preparedness of the participating agencies and the effectiveness of ACPs for the federal response to discharges, and provide technical assistance for preparedness to the response community. The RRT should:

(1) Review and comment, to the extent practicable, on local emergency response plans or other issues related to the preparation, implementation, or exercise of such plans upon request of a local emergency planning committee;

(2) Evaluate regional and local responses to discharges on a continuing basis, considering available legal remedies, equipment readiness, and coordination among responsible public agencies and private organizations, and recommend improvements;

(3) Recommend revisions of the NCP to the NRT, based on observations of response operations;

(4) Review OSC actions to ensure that RCPs and ACPs are effective;

(5) Encourage the state and local response community to improve its preparedness for response;

(6) In coordination with the Area Committee and in accordance with any applicable laws, regulations, or requirements, conduct advance planning for use of dispersants, surface washing agents, surface collecting agents, burning agents, bioremediation agents, or other chemical agents in accordance with subpart J of this **part**;

(7) Be prepared to provide response resources to major discharges or releases outside the region;

(8) Conduct or participate in training and exercises as necessary to encourage preparedness activities of the response community within the region;

(9) Meet at least semiannually to review response actions carried out during the preceding period, consider changes in RCPs, and recommend changes in ACPs;

(10) Provide letter reports on RRT activities to the NRT twice a year, no later than January 31 and July 31; and

(11) Ensure maximum participation in the national exercise program for announced and unannounced exercises.

(j)(1) The RRT may be activated by the chair as an incident-specific response team when a discharge:

(A) Exceeds the response capability available to the OSC in the place where it occurs;

(B) Transects state boundaries;

(C) May pose a substantial threat to the public health or welfare, or to regionally significant amounts of property; or

(D) Is a worst case discharge, as defined in section 1.5 of this appendix.

(2) The RRT shall be activated during any discharge upon a request from the OSC, or from any RRT representative, to the chair of the RRT. Requests for RRT activation shall later be confirmed in writing. Each representative, or an appropriate alternate, should be notified immediately when the RRT is activated.

(3) During prolonged removal or remedial action, the RRT may not need to be activated or may need to be activated only in a limited sense, or may need to have available only those member agencies of the RRT who are directly affected or who can provide direct response assistance.

(4) When the RRT is activated for a discharge or release, **agency** representatives will meet at the call of the chair and may:

(A) Monitor and evaluate reports from the OSC, advise the OSC on the duration and extent of response, and recommend to the OSC specific actions to respond to the discharge;

(B) Request other federal, state, or local governments, or private agencies, to provide resources under their existing authorities to respond to a discharge or to monitor response operations;

(C) Help the OSC prepare information releases for the public and for communication with the NRT;

(D) If the circumstances warrant, make recommendations to the regional or district head of the **agency** providing the OSC that a different OSC should be designated; and

(E) Submit pollution reports to the NRC as significant developments occur.

(5) RCPs shall specify detailed criteria for activation of RRTs.

(6) At the regional level, a Regional Response Center (RRC) may provide facilities and personnel for communications, information storage, and other requirements for coordinating response. The location of each RRC should be provided in the RCP.

(7) When the RRT is activated, affected states may participate in all RRT deliberations. State government representatives participating in the RRT have the same status as any federal member of the RRT.

(8) The RRT can be deactivated when the incident-specific RRT chair determines that the OSC no longer requires RRT assistance.

(9) Notification of the RRT may be appropriate when full activation is not necessary, with systematic communication of pollution reports or other means to keep RRT members informed as to actions of potential concern to a particular **agency**, or to assist in later RRT evaluation of regionwide response effectiveness.

(k) Whenever there is insufficient national policy guidance on a matter before the RRT, a technical matter requiring solution, a question concerning interpretation of the NCP, or a disagreement on discretionary actions among RRT members that cannot be resolved at the regional level, it may be referred to the NRT for advice.

3.3 Area.

3.3.1 On-scene coordinator. The OSC is the federal official predesignated by EPA or the USCG to coordinate and direct federal responses under subpart D of the NCP. The USCG shall provide OSCs for oil discharges, including discharges from facilities and vessels under the jurisdiction of another federal **agency**, within or threatening the coastal zone. EPA shall provide OSCs for discharges into or threatening the inland zone. In carrying out a response, the OSC may direct or monitor all federal, state, and private actions to remove a discharge. In contingency planning and removal, the OSC coordinates, directs, and reviews the work of other agencies, Area Committees, responsible parties, and contractors to assure compliance with the NCP, decision document, consent decree, administrative order, and lead **agency**-approved plans applicable to the response.

3.3.2 Area committees. (a) Area Committees shall be responsible for: (1) preparing an ACP for their areas; (2) working with appropriate federal, state, and local officials to enhance the contingency planning of those officials and to assure pre-planning of joint response efforts, including appropriate procedures for mechanical recovery, dispersal, shoreline cleanup, **protection** of sensitive **environmental** areas, and **protection**, rescue, and rehabilitation of fisheries and wildlife; and (3) working with appropriate federal, state, and local officials to expedite decisions for the use of dispersants and other mitigating substances and devices.

(b) The OSC is responsible for overseeing development of the ACP in the area of the OSC's responsibility. The ACP, when implemented in conjunction with other provisions of the NCP, shall be adequate to remove a worst case discharge, and to mitigate and prevent a substantial threat of such a discharge, from a vessel, offshore facility, or onshore facility operating in or near the area.

3.3.3 Special teams. (a) Special teams include: NOAA/EPA's SSCs; EPA's **Environmental** Response Team (ERT); and USCG's NSF; DRGs; and NPFC (see Figure 2).

(b) SSCs may be designated by the OSC as the principal advisors for scientific issues, communication with the scientific community, and coordination of requests for assistance from state and federal agencies regarding scientific studies. The SSC strives for a consensus on scientific issues affecting the response, but ensures that differing opinions within the community are communicated to the OSC.

(1) Generally, SSCs are provided by NOAA in the coastal zones,

and by EPA in the inland zone. OSC requests for SSC support may be made directly to the SSC assigned to the area or to the **agency** member of the RRT. NOAA SSCs may also be requested through NOAA's SSC program office in Seattle, WA. NOAA SSCs are assigned to USCG Districts and are supported by a scientific support team that includes expertise in **environmental** chemistry, oil slick tracking, pollutant transport modeling, natural resources at risk, **environmental** tradeoffs of countermeasures and cleanup, and information management.

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(2) During a response, the SSC serves on the federal OSC's staff and may, at the request of the OSC, lead the scientific team and be responsible for providing scientific support for operational decisions and for coordinating on-scene scientific activity. Depending on the nature and location of the incident, the SSC integrates expertise from governmental agencies, universities, community representatives, and industry to assist the OSC in evaluating the hazards and potential effects of releases and in developing response strategies.

(3) At the request of the OSC, the SSC may facilitate the OSC's work with the lead administrative trustee for natural resources to ensure coordination between damage assessment data collection efforts and data collected in support of response operations.

(4) SSCs support the RRTs and the Area Committees in preparing regional and area contingency plans and in conducting spill training and exercises. For area plans, the SSC provides leadership for the synthesis and integration of **environmental** information required for spill response decisions in support of the OSC.

(c) (1) SUPSALV has an extensive salvage/search and recovery equipment inventory with the requisite knowledge and expertise to support these operations, including specialized salvage, firefighting, and petroleum, oil and lubricants offloading capability.

(2) When possible, SUPSALV will provide equipment for training exercises in support of national and regional contingency planning objectives.

(3) The OSC/RPM may request assistance directly from SUPSALV. Formal requests are routed through the Chief of Naval Operations (N312).

(d) The ERT is established by the EPA in accordance with its disaster and emergency responsibilities. The ERT has expertise in treatment technology, biology, chemistry, hydrology, geology and engineering.

(1) The ERT can provide access to special decontamination equipment and advice to the OSC in hazard evaluation; risk assessment; multimedia sampling and analysis program; on-site safety, including development and implementation plans; cleanup techniques and priorities; water supply decontamination and **protection**; application of dispersants; **environmental** assessment; degree of cleanup required; and disposal of contaminated material. The ERT also provides both introductory and intermediate level training courses to prepare response personnel.

(2) OSC or RRT requests for ERT support should be made to the EPA representative on the RRT; EPA Headquarters, Director, Emergency Response Division; or the appropriate EPA regional emergency coordinator.

(e) The NSF is a special team established by the USCG, including the three USCG Strike Teams, the Public Information Assist Team (PIAT), and the NSFCC. The NSF is available to assist OSCs in their preparedness and response duties.

(1) The three Strike Teams (Atlantic, Gulf, and Pacific) provide trained personnel and specialized equipment to assist the OSC in training for spill response, stabilizing and containing the spill, and in monitoring or directing the response actions of the responsible parties and/or contractors. The OSC has a specific team designated for initial contact and may contact that team directly for any assistance.

(2) The NSFCC can provide the following support to the OSC:

--Technical assistance, equipment and other resources to augment the OSC staff during spill response;

--Assistance in coordinating the use of private and public resources in support of the OSC during a response to or a threat of a worst case discharge of oil;

--Review of the ACP, including an evaluation of equipment readiness and coordination among responsible public agencies and private organizations;

--Assistance in locating spill response resources for both response and planning, using the NSFCC's national and international computerized inventory of spill response resources;

--Coordination and evaluation of pollution response exercises; and

--Inspection of district prepositioned pollution response equipment.

(3) PIAT is an element of the NSFCC staff which is available to assist OSCs to meet the demands for public information during a response or exercise. Its use is encouraged any time the OSC requires outside public affairs support. Requests for PIAT assistance may be made through the NSFCC or NRC.

(f)(1) The DRG assists the OSC by providing technical assistance, personnel, and equipment, including pre-positioned equipment. Each DRG consists of all Coast Guard personnel and equipment, including marine firefighting equipment, in its district, additional pre-positioned equipment, and a District Response Advisory Team (DRAT) that is available to provide support to the OSC in the event that a spill exceeds local response capabilities. Each DRG:

(A) Shall provide technical assistance, equipment, and other resources as available when requested by an OSC through the USCG representative to the RRT;

(B) Shall ensure maintenance of all USCG response equipment within its district;

(C) May provide technical assistance in the preparation of the ACP; and

(D) Shall review each of those plans that affect its area of geographic responsibility.

(2) In deciding where to locate personnel and pre-positioned equipment, the USCG shall give priority emphasis to:

(A) The availability of facilities for loading and unloading heavy or bulky equipment by barge;

(B) The proximity to an airport capable of supporting large military transport aircraft;

(C) The flight time to provide response to oil spills in all

areas of the Coast Guard district with the potential for marine casualties;

(D) The availability of trained local personnel capable of responding in an oil spill emergency; and

(E) Areas where large quantities of petroleum products are transported.

(g) The NPFC is responsible for implementing those portions of Title I of the OPA that have been delegated to the Secretary of the department in which the Coast Guard is operating. The NPFC is responsible for addressing funding issues arising from discharges and threats of discharges of oil. The NPFC:

(1) Issues Certificates of Financial Responsibility to owners and operators of vessels to pay for costs and damages that are incurred by their vessels as a result of oil discharges; (2) Provides funding for various response organizations for timely abatement and removal actions related to oil discharges;

(3) Provides equitable compensation to claimants who sustain costs and damages from oil discharges when the responsible party fails to do so;

(4) Recovers monies from persons liable for costs and damages resulting from oil discharges to the full extent of liability under the law; and

(5) Provides funds to initiate natural resources damage assessment.

(h) The organizational concepts of the national response system discussed above are depicted in Figure 3.

4.0 Preparedness activities.

4.1 Federal contingency plans. This section summarizes emergency preparedness activities relating to discharges of oil and describes the three levels of contingency planning under the national response system.

4.1.1 National contingency plan. (a) The NCP provides for efficient, coordinated, and effective response to discharges of oil in accordance with the authorities of the CWA. It provides for:

(1) The national response organization that may be activated in response actions and specifies responsibilities among the federal, state, and local governments and describes resources that are available for response;

(2) The establishment of requirements for federal, regional, and area contingency plans;

(3) Procedures for undertaking removal actions pursuant to section 311 of the CWA;

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(4) Procedures for involving state governments in the initiation, development, selection, and implementation of response actions;

(5) Listing of federal trustees for natural resources for purposes of the CWA;

(6) Procedures for the participation of other persons in response actions; and

(7) National procedures for the use of dispersants and other chemicals in removals under the CWA.

(b) In implementing the NCP, consideration shall be given to

international assistance plans and agreements, security regulations and responsibilities based on international agreements, federal statutes, and executive orders. Actions taken pursuant to the provisions of any applicable international joint contingency plans shall be consistent with the NCP, to the greatest extent possible. The Department of State shall be consulted, as appropriate, prior to taking action which may affect its activities.

4.1.2 Regional contingency plans. The RRTs, working with the states, shall develop federal RCPs for each standard federal region, Alaska, Oceania in the Pacific, and the Caribbean to coordinate timely, effective response by various federal agencies and other organizations to discharges of oil. RCPs shall, as appropriate, include information on all useful facilities and resources in the region, from government, commercial, academic, and other sources. To the greatest extent possible, RCPs shall follow the format of the NCP and be coordinated with state emergency response plans, ACPs, and Title III local emergency response plans. Such coordination should be accomplished by working with the SERCs in the region covered by the RCP. RCPs shall contain lines of demarcation between the inland and coastal zones, as mutually agreed upon by the USCG and the EPA.

4.1.3 Area contingency plans. (a) Under the direction of an OSC and subject to approval by the lead **agency**, each Area Committee, in consultation with the appropriate RRTs, DRGs, the NSFCC, SSCs, Local Emergency Planning Committees (LEPCs), and SERCs, shall develop an ACP for its designated area. This plan, when implemented in conjunction with other provisions of the NCP, shall be adequate to remove a worst case discharge, and to mitigate or prevent a substantial threat of such a discharge, from a vessel, offshore facility, or onshore facility operating in or near the area.

(b) The areas of responsibility may include several Title III local planning districts, or parts of such districts. In developing the ACP, the OSC shall coordinate with affected SERCs and LEPCs. The ACP shall provide for a well coordinated response that is integrated and compatible to the greatest extent possible with all appropriate response plans of state, local, and non-federal entities, and especially with Title III local emergency response plans.

(c) The ACP shall include the following:

(1) A description of the area covered by the plan, including the areas of special economic or **environmental** importance that might be impacted by a discharge;

(2) A description in detail of the responsibilities of an owner or operator and of federal, state, and local agencies in removing a discharge, and in mitigating or preventing a substantial threat of a discharge;

(3) A list of equipment (including firefighting equipment), dispersants, or other mitigating substances and devices, and personnel available to an owner or operator and federal, state, and local agencies, to ensure an effective and immediate removal of a discharge, and to ensure mitigation or prevention of a substantial threat of a discharge (this may be provided in an appendix or by reference to other relevant emergency plans (e.g., state or LEPC plans), which may include such equipment lists);

(4) A description of procedures to be followed for obtaining an expedited decision regarding the use of dispersants; and

(5) A detailed description of how the plan is integrated into other ACPs and tank vessel, offshore facility, and onshore facility response plans approved by the President, and into operating procedures of the NSFCC.

4.1.4 Fish and Wildlife and sensitive environments plan annex.

(a) In order to provide for coordinated, immediate and effective **protection**, rescue, and rehabilitation of, and minimization of risk of injury to, fish and wildlife resources and habitat, Area Committees shall incorporate into each ACP a detailed annex containing a Fish and Wildlife and Sensitive Environments Plan that is consistent with the RCP and NCP. The annex shall be prepared in consultation with the U.S. Fish and Wildlife Service (FWS) and NOAA and other interested natural resource management agencies and parties. It shall address fish and wildlife resources and their habitat, and shall include other areas considered sensitive environments in a separate section of the annex, based upon Area Committee recommendations. The annex shall provide the necessary information and procedures to immediately and effectively respond to discharges that may adversely affect fish and wildlife and their habitat and sensitive environments, including provisions for a response to a worst case discharge. Such information shall include the identification of appropriate agencies and their responsibilities, procedures to notify these agencies following a discharge or threat of a discharge; protocols for obtaining required fish and wildlife permits and other necessary permits, and provisions to ensure compatibility of annex-related activities with removal operations.

(b) The annex shall:

(1) Identify and establish priorities for fish and wildlife resources and their habitats and other important sensitive areas requiring **protection** from any direct or indirect effects from discharges that may occur. These effects include, but are not limited to, any seasonal or historical use, as well as all critical, special, significant or otherwise designated protected areas.

(2) Provide a mechanism to be used during a spill response for timely identification of **protection** priorities of those fish and wildlife resources and habitats and sensitive **environmental** areas that may be threatened or injured by a discharge. These include as appropriate, not only marine and freshwater species, habitats, and their food sources, but also terrestrial wildlife and their habitats that may be affected directly by onshore oil or indirectly by oil-related factors, such as loss or contamination of forage. The mechanism shall also provide for expeditious evaluation and appropriate consultations on the effects to fish and wildlife, their habitat, and other sensitive environments from the application of chemical countermeasures or other countermeasures not addressed under paragraph (3) of this section.

(3) Identify potential **environmental** effects on fish and wildlife, their habitat, and other sensitive environments resulting from removal actions or countermeasures, including the option of no removal. Based on this evaluation of potential **environmental** effects, the annex should establish priorities for application of countermeasure and removal actions to habitats within the geographic region of the ACP. The annex should establish methods to minimize the identified effects on fish and wildlife because of response activities, including, but not limited to, disturbance of sensitive areas and habitats; illegal or inadvertent taking or disturbance of fish and wildlife or specimens by response personnel; and fish and wildlife, their habitat, and environmentally sensitive areas coming in contact with various cleaning or bioremediation agents. Furthermore, the annex should identify the areas where the movement of oiled debris may pose a risk to resident, transient, or migratory fish and wildlife, and other sensitive environments and should

discuss measures to be considered for removing such oiled debris in a timely fashion to reduce such risk.

(4) Provide for pre-approval of application of specific countermeasures or removal actions that, if expeditiously applied, will minimize adverse spill-induced impacts to fish and wildlife resources, their habitat, and other sensitive environments. Such pre-approval plans must be consistent with paragraphs (2) and (3) of this section and subpart J requirements of the NCP, and must have the concurrence of the natural resource trustees.

(5) Provide monitoring plan(s) to evaluate the effectiveness of different countermeasures or removal actions in protecting the environment. Monitoring should include ``set-aside'' or ``control'' areas, where no mitigative actions are taken.

(6) Identify and plan for the acquisition and utilization of necessary response capabilities for **protection**, rescue, and rehabilitation of fish and wildlife resources and habitat. This may include appropriately permitted private organizations and individuals with appropriate expertise and experience. The suitable organizations should be identified in cooperation with natural resource law enforcement agencies. Such capabilities shall include, but not be limited to, identification of facilities and equipment necessary for deterring sensitive fish and wildlife from entering oiled areas, and for capturing, holding, cleaning, and releasing injured wildlife. Plans for the provision of such capabilities shall ensure that there is no interference with other OSC removal operations.

(7) Identify appropriate federal and state **agency** contacts and alternates responsible for coordination of fish and wildlife rescue and rehabilitation and **protection** of sensitive environments; identify and provide for required fish and wildlife handling and rehabilitation permits necessary under federal and state laws; and provide guidance on the implementation of law enforcement requirements included under current federal and state laws and corresponding regulations. Requirements include, but are not limited to procedures regarding the capture, transport, rehabilitation, release of wildlife exposed to or threatened by oil, and disposal of contaminated carcasses of wildlife.

(8) Identify and secure the means for providing, if needed, the minimum required Occupational Safety and Health Administration (OSHA) training for volunteers, including those who assist with injured wildlife.

(9) Evaluate the compatibility between this annex and non-federal response plans (including those of vessels, facilities and pipelines) on issues affecting fish and wildlife, their habitat, and sensitive environments.

4.2 OPA facility and vessel response plans

This section describes and cross-references the regulations that implement section 311(j)(5) of the CWA. A tank vessel, as defined under section 2101 of title 46, U.S. Code, an offshore facility, and an onshore facility that, because of its location, could reasonably expect to cause substantial harm to the environment by discharging into or on the navigable waters, adjoining shorelines, or exclusive economic zone must prepare and submit a plan for responding, to the maximum extent practicable, to a worst case discharge, and to a substantial threat of such a discharge, of oil or a hazardous substance. These response plans are required to be consistent with applicable Area Contingency Plans. These regulations are codified as

follows:

- (a) For tank vessels, these regulations are codified in 33 **CFR part** 155;
- (b) For offshore facilities, these regulations are codified in 30 **CFR part** 254;
- (c) For non-transportation related onshore facilities, these regulations are codified in 40 **CFR part** 112.20;
- (d) For transportation-related onshore facilities, these regulations are codified in 33 **CFR part** 154;
- (e) For pipeline facilities, these regulations are codified in 49 **CFR part** 194; and
- (f) For rolling stock, these regulations are codified in 49 **CFR part** 106 et al.

4.3 Relation to others plans.

4.3.1 Federal response plans. In the event of a declaration of a major disaster by the President, the FEMA may activate the Federal Response Plan (FRP). A Federal Coordinating Officer (FCO), designated by the President, may implement the FRP and coordinate and direct emergency assistance and disaster relief of impacted individuals, business, and public services under the Robert T. Stafford Disaster Relief Act. Delivery of federal assistance is facilitated through twelve functional annexes to the FRP known as Emergency Support Functions (ESFs). EPA coordinates activities under ESF #10--Hazardous Materials, which addresses preparedness and response to hazardous materials and oil incidents caused by a natural disaster or other catastrophic event. In such cases, the OSC should coordinate response activities with the FCO, through the incident-specific ESF #10 Chair, to ensure consistency with federal disaster assistance activities.

4.3.2 Tank Vessel and Facility Response Plans. (a) Under CWA section 311(j)(5), tank vessels, offshore facilities, and certain onshore facilities are required to prepare and submit response plans for review and approval by the President for the carriage, storage, and transportation of oil and hazardous substances. Separate regulations published by the appropriate federal agencies provide for required response plan development and/or approval.

(b) These plans shall be developed to coordinate responsible party actions with the OSC and the ACP response strategies, for response to oil discharges within the inland and coastal zones of the United States.

4.4 Pre-approval authority.

(a) RRTs and Area Committees shall address, as **part** of their planning activities, the desirability of using appropriate dispersants, surface washing agents, surface collecting agents, bioremediation agents, or miscellaneous oil spill control agents listed on the NCP Product Schedule, and the desirability of using appropriate burning agents. RCPs and ACPs shall, as appropriate, include applicable preauthorization plans and address the specific contexts in which such products should and should not be used. In meeting the provisions of this paragraph, preauthorization plans may address factors such as the potential sources and types of oil that might be spilled, the existence and location of environmentally sensitive resources that might be impacted by spilled oil, available product and storage locations, available equipment and adequately trained operators, and the available means to monitor product

application and effectiveness. The RRT representatives from EPA and the states with jurisdiction over the waters of the area to which a preauthorization plan applies and the DOC and DOI natural resource trustees shall review and either approve, disapprove, or approve with modification the preauthorization plans developed by Area Committees, as appropriate. Approved preauthorization plans shall be included in the appropriate RCPs and ACPs. If the RRT representatives from EPA and the states with jurisdiction over the waters of the area to which a preauthorization plan applies and the DOC and DOI natural resource trustees approve in advance the use of certain products under specified circumstances as described in the preauthorization plan, the OSC may authorize the use of the products without obtaining the specific concurrences described in paragraphs (b) and (c) of this section.

(b) For spill situations that are not addressed by the preauthorization plans developed pursuant to paragraph (a) of this section, the OSC, with the concurrence of the EPA representative to the RRT and, as appropriate, the concurrence of the RRT representatives from the states with jurisdiction over the navigable waters threatened by the discharge, and in consultation with the DOC and DOI natural resource trustees, when practicable, may authorize the use of dispersants, surface washing agents, surface collecting agents, bioremediation agents, or miscellaneous oil spill control agents on the oil discharge, provided that the products are listed on the NCP Product Schedule.

(c) The OSC, with the concurrence of the EPA representative to the RRT and, as appropriate, the concurrence of the RRT representatives from the states with jurisdiction over the navigable waters threatened by the discharge, and in consultation with the DOC and DOI natural resource trustees, when practicable, may authorize the use of burning agents on a case-by-case basis.

(d) The OSC may authorize the use of any dispersant, surface washing agent, surface collecting agent, other chemical agent, burning agent, bioremediation agent, or miscellaneous oil spill control agent, including products not listed on the NCP Product Schedule, without obtaining the concurrence of the EPA representative to the RRT and, as appropriate, the RRT representatives from the states with jurisdiction over the navigable waters threatened by the discharge, when, in the judgment of the OSC, the use of the product is necessary to prevent or substantially reduce a hazard to human life. Whenever the OSC authorizes the use of a product pursuant to this paragraph, the OSC is to inform the EPA RRT representative and, as appropriate, the RRT representatives from the affected states and, when practicable, the DOC/DOI natural resource trustees of the use of a product, including products not on the Schedule, as soon as possible. Once the threat to human life has subsided, the continued use of a product shall be in accordance with paragraphs (a), (b), and (c) of this section.

(e) Sinking agents shall not be authorized for application to oil discharges.

(f) When developing preauthorization plans, RRTs may require the performance of supplementary toxicity and effectiveness testing of products, in addition to the test methods specified in Sec. 300.915 and described in Appendix C to **part 300**, due to existing site-specific or area-specific concerns.

4.5 Area response drills. The OSC periodically shall conduct drills of removal capability (including fish and wildlife response), without prior notice, in areas for which ACPs are required and under relevant tank vessel and facility response plans.

5.0 Response operations.

(a) The OSC shall direct response efforts and coordinate all other efforts at the scene of a discharge. As **part** of the planning and preparation for response, OSCs shall be predesignated by the regional or district head of the lead **agency**.

(b) The first federal official affiliated with an NRT member **agency** to arrive at the scene of a discharge should coordinate activities under the NCP and is authorized to initiate, in consultation with the OSC, any necessary actions normally carried out by the OSC until the arrival of the predesignated OSC. This official may initiate federal OSLTF-financed actions only as authorized by the OSC or, if the OSC is unavailable, the authorized representative of the lead **agency**.

(c) The OSC shall, to the extent practicable, collect pertinent facts about the discharge, such as its source and cause; the identification of responsible parties; the nature, amount, and location of discharged materials; the probable direction and time of travel of discharged materials; whether the discharge is a worst case discharge; the pathways to human and **environmental** exposure; the potential impact on human health, welfare, and safety and the environment; whether the discharge poses a substantial threat to the public health or welfare; the potential impact on natural resources and property which may be affected; priorities for protecting human health and welfare and the environment; and appropriate cost documentation.

(d) The OSC's efforts shall be coordinated with other appropriate federal, state, local, and private response agencies. OSCs may designate capable persons from federal, state, or local agencies to act as their on-scene representatives. State and local governments, however, are not authorized to take actions under subpart D of the NCP that involve expenditures of the OSLTF unless an appropriate contract or cooperative agreement has been established.

(e) The OSC should consult regularly with the RRT and NSFCC, as appropriate, in carrying out the NCP and keep the RRT and NSFCC, as appropriate, informed of activities under the NCP.

(f) The OSC should evaluate incoming information and immediately advise FEMA of potential major disaster situations.

(g) The OSC is responsible for addressing worker health and safety concerns at a response scene.

(h) In those instances where a possible public health emergency exists, the OSC should notify the HHS representative to the RRT. Throughout response actions, the OSC may call upon the OSHA and HHS representative for assistance on worker health and safety issues.

(i) All federal agencies should plan for emergencies and develop procedures for dealing with oil discharges and releases of hazardous substances, pollutants, or contaminants from vessels and facilities under their jurisdiction. All federal agencies, therefore, are responsible for designating the office that coordinates response to such incidents in accordance with the NCP and applicable federal regulations and guidelines.

(j)(1) The OSC shall ensure that the natural resource trustees are promptly notified of discharges.

(2) The OSC shall coordinate all response activities with the affected natural resource trustees and shall consult with the affected trustees on the appropriate removal action to be taken.

(3) Where the OSC becomes aware that a discharge may affect any

endangered or threatened species, or their habitat, the OSC shall consult with DOI, DOC/NOAA, and, if appropriate, the cognizant federal land managing **agency**.

(k) The OSC shall submit pollution reports (POLREPs) to the RRT and other appropriate agencies as significant developments occur during response actions, through communications networks or procedures agreed to by the RRT and covered in the RCP.

(l) The OSC should ensure that all appropriate public and private interests are kept informed and that their concerns are considered throughout a response, to the extent practicable.

5.1 Phase I--Discovery or notification. (a) A discharge of oil may be discovered through:

(1) A report submitted by the person in charge of a vessel or facility, in accordance with statutory requirements;

(2) Deliberate search by patrols;

(3) Random or incidental observation by government agencies or the public; or

(4) Other sources.

(b) Any person in charge of a vessel or a facility shall, as soon as he or she has knowledge of any discharge from such vessel or facility in violation of section 311(b)(3) of the CWA, immediately notify the NRC. Notification shall be made to the NRC Duty Officer, HQ USCG, Washington, DC, telephone (800) 424-8802 or (202) 267-2675. If direct reporting to the NRC is not practicable, reports may be made to the USCG or EPA predesignated OSC for the geographic area where the discharge occurs. The EPA predesignated OSC may also be contacted through the regional 24-hour emergency response telephone number. All such reports shall be promptly relayed to the NRC. If it is not possible to notify the NRC or predesignated OSC immediately, reports may be made immediately to the nearest Coast Guard unit. In any event, such person in charge of the vessel or facility shall notify the NRC as soon as possible.

(c) Any other person shall, as appropriate, notify the NRC of a discharge of oil.

(d) Upon receipt of a notification of discharge, the NRC shall promptly notify the OSC. The OSC shall ensure notification of the appropriate state **agency** of any state which is, or may reasonably be expected to be, affected by the discharge. The OSC shall then proceed with the following phases as outlined in the RCP and ACP.

5.2 Phase II--Preliminary assessment and initiation of action

(a) The OSC is responsible for promptly initiating a preliminary assessment.

(b) The preliminary assessment shall be conducted using available information, supplemented where necessary and possible by an on-scene inspection. The OSC shall undertake actions to:

(1) Evaluate the magnitude and severity of the discharge or threat to public health or welfare or the environment;

(2) Assess the feasibility of removal; and

(3) To the extent practicable, identify potentially responsible parties.

(c) Where practicable, the framework for the response management structure is a system (e.g., a unified command system), that brings together the functions of the federal government, the state government, and the responsible party to achieve an effective and efficient response, where the OSC maintains authority.

(d) Except in a case when the OSC is required to direct the response to a discharge that may pose a substantial threat to the public health or welfare (including, but not limited to fish, shellfish, wildlife, other natural resources, and the public and

private beaches and shorelines of the United States), the OSC may allow the responsible party to voluntarily and promptly perform removal actions, provided the OSC determines such actions will ensure an effective and immediate removal of the discharge or mitigation or prevention of a substantial threat of a discharge. If the responsible party does conduct the removal, the OSC shall ensure adequate surveillance over whatever actions are initiated. If effective actions are not being taken to eliminate the threat, or if removal is not being properly done, the OSC should, to the extent practicable under the circumstances, so advise the responsible party. If the responsible party does not respond properly, the OSC shall take appropriate response actions and should notify the responsible party of the potential liability for federal response costs incurred by the OSC pursuant to the OPA and CWA. Where practicable, continuing efforts should be made to encourage response by responsible parties.

(1) In carrying out a response under this section, the OSC may:

(A) Remove or arrange for the removal of a discharge, and mitigate or prevent a substantial threat of a discharge, at any time;

(B) Direct or monitor all federal, state, and private actions to remove a discharge; and

(C) Remove and, if necessary, destroy a vessel discharging, or threatening to discharge, by whatever means are available.

(2) If the discharge results in a substantial threat to the public health or welfare of the United States (including, but not limited to fish, shellfish, wildlife, other natural resources, and the public and private beaches and shorelines of the United States), the OSC must direct all response efforts, as provided in section 5.3.4 of this appendix. The OSC should declare as expeditiously as practicable to spill response participants that the federal government will direct the response. The OSC may act without regard to any other provision of the law governing contracting procedures or employment of personnel by the federal government in removing or arranging for the removal of such a discharge.

(e) The OSC shall ensure that the natural resource trustees are promptly notified in the event of any discharge of oil, to the maximum extent practicable as provided in the Fish and Wildlife and Sensitive Environments Plan annex to the ACP for the area in which the discharge occurs. The OSC and the trustees shall coordinate assessments, evaluations, investigations, and planning with respect to appropriate removal actions. The OSC shall consult with the affected trustees on the appropriate removal action to be taken. The trustees will provide timely advice concerning recommended actions with regard to trustee resources potentially affected. The trustees also will assure that the OSC is informed of their activities in natural resource damage assessment that may affect response operations. The trustees shall assure, through the lead administrative trustee, that all data from the natural resource damage assessment activities that may support more effective operational decisions are provided in a timely manner to the OSC. When circumstances permit, the OSC shall share the use of non-monetary response resources (i.e., personnel and equipment) with the trustees, provided trustee activities do not interfere with response actions. The lead administrative trustee facilitates effective and efficient communication between the OSC and the other trustees during response operations and is responsible for applying to the OSC for non-monetary federal response resources on behalf of all trustees. The lead administrative trustee is also responsible for applying to the National Pollution Funds Center for funding for

initiation of damage assessment for injuries to natural resources.

5.3 Patterns of response.

5.3.1 Determinations to initiate response and special conditions.

(a) In accordance with the CWA, the Administrator of EPA or the Secretary of the department in which the USCG is operating, as appropriate, is authorized to act for the United States to take response measures deemed necessary to protect the public health or welfare or environment from discharges of oil.

(b) The Administrator of EPA or the Secretary of the department in which the USCG is operating, as appropriate, is authorized to initiate and, in the case of a discharge posing a substantial threat to public health or welfare is required to initiate and direct, appropriate response activities when the Administrator or Secretary determines that any oil is discharged or there is a substantial threat of such discharge from any vessel or offshore or onshore facility into or on the navigable waters of the United States, on the adjoining shorelines to the navigable waters, into or on the waters of the exclusive economic zone, or that may affect natural resources belonging to, appertaining to, or under exclusive management authority of the United States.

(c) In addition to any actions taken by a state or local government, the Administrator of EPA or the Secretary of the department in which the USCG is operating may request the U.S. Attorney General to secure the relief from any person, including the owner or operator of the vessel or facility necessary to abate a threat or, after notice to the affected state, take any other action authorized by section 311 of the CWA, including issuing administrative orders, that may be necessary to protect the public health or welfare, if the Administrator or Secretary determines that there may be an imminent and substantial threat to the public health or welfare or the environment of the United States, including fish, shellfish, and wildlife, public and private property, shorelines, beaches, habitats, and other living and nonliving natural resources under the jurisdiction or control of the United States, because of an actual or threatened discharge of oil from any vessel or offshore or onshore facility into or upon the navigable waters of the United States.

(d) Response actions to remove discharges originating from operations conducted subject to the Outer Continental Shelf Lands Act shall be in accordance with the NCP.

(e) Where appropriate, when a discharge involves radioactive materials, the lead or support federal **agency** shall act consistent with the notification and assistance procedures described in the appropriate Federal Radiological Plan. For the purpose of the NCP, the Federal Radiological Emergency Response Plan (FRERP) (50 FR 46542, November 8, 1985) is the appropriate plan. Most radiological discharges and releases do not result in FRERP activation and should be handled in accordance with the NCP. However, releases from nuclear incidents subject to requirements for financial **protection** established by the Nuclear Regulatory Commission under the Price-Anderson amendments (section 170) of the Atomic Energy Act are specifically excluded from CERCLA and NCP requirements.

(f) Removal actions involving nuclear weapons should be conducted in accordance with the joint Department of Defense, Department of Energy, and FEMA Agreement for Response to Nuclear Incidents and Nuclear Weapons Significant Incidents (January 8, 1981).

(g) If the situation is beyond the capability of state and local

governments and the statutory authority of federal agencies, the President may, under the Disaster Relief Act of 1974, act upon a request by the Governor and declare a major disaster or emergency and appoint a FCO to coordinate all federal disaster assistance activities. In such cases, the OSC would continue to carry out OSC responsibilities under the NCP, but would coordinate those activities with the FCO to ensure consistency with other federal disaster assistance activities.

(h) In the event of a declaration of a major disaster by the President, FEMA may activate the FRP. An FCO, designated by the President, may implement the FRP and coordinate and direct emergency assistance and disaster relief of impacted individuals, business, and public services under the Robert T. Stafford Disaster Relief Act. Delivery of federal assistance is facilitated through twelve functional annexes to the FRP known as ESFs. EPA coordinates activities under ESF #10--Hazardous Materials, which addresses preparedness and response to hazardous materials and oil incidents caused by a natural disaster or other catastrophic event. In such cases, the OSC/RPM should coordinate response activities with the FCO, through the incident-specific ESF #10 Chair, to ensure consistency with federal disaster assistance activities.

5.3.2 General pattern of response. (a) When the OSC receives a report of a discharge, actions normally should be taken in the following sequence:

(1) Investigate the report to determine pertinent information such as the threat posed to public health or welfare or the environment, the type and quantity of polluting material, and the source of the discharge.

(2) Officially classify the size (i.e., minor, medium, major) and type (i.e., substantial threat to the public health or welfare, worst case discharge) of the discharge and determine the course of action to be followed to ensure effective and immediate removal, mitigation, or prevention of the discharge. Some discharges that are classified as a substantial threat to the public health or welfare may be further classified as a spill of national significance by the Administrator of EPA or the Commandant of the USCG. The appropriate course of action may be prescribed in 5.3.4, 5.3.5, and 5.3.6 of this appendix.

(A) When the reported discharge is an actual or potential major discharge, the OSC shall immediately notify the RRT and the NRC.

(B) When the investigation shows that an actual or potential medium discharge exists, the OSC shall recommend activation of the RRT, if appropriate.

(C) When the investigation shows that an actual or potential minor discharge exists, the OSC shall monitor the situation to ensure that proper removal action is being taken.

(3) If the OSC determines that effective and immediate removal, mitigation, or prevention of a discharge can be achieved by private party efforts, and where the discharge does not pose a substantial threat to the public health or welfare, determine whether the responsible party or other person is properly carrying out removal. Removal is being done properly when:

(A) The responsible party is applying the resources called for in its response plan to effectively and immediately remove, minimize, or mitigate threat(s) to public health and welfare and the environment; and

(B) The removal efforts are in accordance with applicable regulations, including the NCP. Even if the OSC supplements responsible party resources with government resources, the spill response will not be considered improper, unless specifically

determined by the OSC.

(4) Where appropriate, determine whether a state or political subdivision thereof has the capability to carry out any or all removal actions. If so, the OSC may arrange funding to support these actions.

(5) Ensure prompt notification of the trustees of affected natural resources in accordance with the applicable RCP and ACP.

(b) Removal shall be considered complete when so determined by the OSC in consultation with the Governor or Governors of the affected states. When the OSC considers removal complete, OSLTF removal funding shall end. This determination shall not preclude additional removal actions under applicable state law.

5.3.3 Containment, countermeasures, and cleanup. (a) Defensive actions shall begin as soon as possible to prevent, minimize, or mitigate threat(s) to the public health or welfare or the environment. Actions may include but are not limited to: analyzing water samples to determine the source and spread of the oil; controlling the source of discharge; source and spread control or salvage operations; placement of physical barriers to deter the spread of the oil and to protect natural resources and sensitive ecosystems; measuring and sampling; control of the water discharged from upstream impoundment; and the use of chemicals and other materials in accordance with subpart J of **Part 300** of the NCP to restrain the spread of the oil and mitigate its effects. The ACP should be consulted for procedures to be followed for obtaining an expedited decision regarding the use of dispersants and other products listed on the NCP Product Schedule.

(b) As appropriate, actions shall be taken to recover the oil or mitigate its effects. Of the numerous chemical or physical methods that may be used, the chosen methods shall be the most consistent with protecting public health and welfare and the environment. Sinking agents shall not be used.

(c) Oil and contaminated materials recovered in cleanup operations shall be disposed of in accordance with the RCP, ACP, and any applicable laws, regulations, or requirements. RRT and Area Committee guidelines may identify the disposal options available during an oil spill response and may describe what disposal requirements are mandatory or may not be waived by the OSC. ACP guidelines should address: the sampling, testing, and classifying of recovered oil and oiled debris; the segregation and stockpiling of recovered oil and oiled debris; prior state disposal approvals and permits; and the routes; methods (e.g. recycle/reuse, on-site burning, incineration, landfilling, etc.); and sites for the disposal of collected oil, oiled debris, and animal carcasses; procedures for obtaining waivers, exemptions, or authorizations associated with handling or transporting waste materials. The ACPs may identify a hierarchy of preferences for disposal alternatives, with recycling (reprocessing) being the most preferred, and other alternatives preferred based on priorities for health or the environment.

5.3.4 Response to a substantial threat to the public health or welfare. (a) The OSC shall determine whether a discharge results in a substantial threat to public health or welfare (including, but not limited to, fish, shellfish, wildlife, other natural resources, the public and private beaches, and shorelines of the United States). Factors to be considered by the OSC in making this determination include, but are not limited to, the size of the discharge, the character of the discharge, and the nature of the threat to public health or welfare. Upon obtaining such information, the OSC shall

conduct an evaluation of the threat posed, based on the OSC's experience in assessing other discharges and consultation with senior lead **agency** officials and readily available authorities on issues outside the OSC's technical expertise.

(b) If the investigation by the OSC shows that the discharge poses or may present a substantial threat to public health or welfare, the OSC shall direct all federal, state, or private actions to remove the discharge or to mitigate or prevent the threat of such a discharge, as appropriate. In directing the response in such cases, the OSC may act without regard to any other provision of law governing contracting procedures or employment of personnel by the federal government to:

- (1) Remove or arrange for the removal of the discharge;
- (2) Mitigate or prevent the substantial threat of the discharge;

and

(3) Remove and, if necessary, destroy a vessel discharging, or threatening to discharge, by whatever means are available.

(c) In the case of a substantial threat to the public health or welfare, the OSC shall:

(1) Assess opportunities for the use of various special teams and other assistance, including the use of the services of the NSFCC, as appropriate;

(2) Request immediate activation of the RRT; and

(3) Take whatever additional response actions are deemed appropriate, including but not limited to implementation of the ACP or relevant tank vessel or facility response plan.

(d) When requested by the OSC, the lead **agency** or RRT shall dispatch appropriate personnel to the scene of the discharge to assist the OSC. This assistance may include technical support in the **agency's** areas of expertise and disseminating information to the public. The lead **agency** shall ensure that a contracting officer is available on scene, at the request of the OSC.

5.3.5 Enhanced activities during a spill of national significance. (a) A discharge may be classified as an SONS by the Administrator of EPA for discharges occurring in the inland zone and the Commandant of the USCG for discharges occurring in the coastal zone.

(b) For an SONS in the inland zone, the EPA Administrator may name a senior **Agency** official to assist the OSC in: (1) Communicating with affected parties and the public; and (2) coordinating federal, state, local, and international resources at the national level. This strategic coordination will involve, as appropriate, the NRT, RRT(s), the Governor(s) of affected state(s), and the mayor(s) or other chief executive(s) of local government(s).

(c) For an SONS in the coastal zone, the USCG Commandant may name a National Incident Commander (NIC) who will assume the role of the OSC in: (1) Communicating with affected parties and the public; and (2) coordinating federal, state, local, and international resources at the national level. This strategic coordination shall involve, as appropriate, the NRT, RRT(s), the Governor(s) of affected state(s), and the mayor(s) or other chief executive(s) of local government(s).

5.3.6 Response to worst case discharges. (a) If the investigation by the OSC shows that a discharge is a worst case discharge as defined in the ACP, or there is a substantial threat of such a discharge, the OSC shall:

(1) Notify the NSFCC;

(2) Require, where applicable, implementation of the worst case portion of an approved tank vessel or facility response plan;

(3) Implement the worst case portion of the ACP, if appropriate; and

(4) Take whatever additional response actions are deemed appropriate.

(b) Under the direction of the OSC, the NSFCC shall coordinate use of private and public personnel and equipment, including strike teams, to remove a worst case discharge and mitigate or prevent a substantial threat of such a discharge.

5.3.7 Multi-regional responses. (a) If a discharge moves from the area covered by one ACP or RCP into another area, the authority for response actions should likewise shift. If a discharge affects areas covered by two or more ACPs or RCPs, the response mechanisms of each applicable plan may be activated. In this case, response actions of all regions concerned shall be fully coordinated as detailed in the RCPs and ACPs.

(b) There shall be only one OSC at any time during the course of a response operation. Should a discharge affect two or more areas, EPA, the USCG, DOD, DOE, or other lead **agency**, as appropriate, shall give prime consideration to the area vulnerable to the greatest threat, in determining which **agency** should provide the OSC. The RRT shall designate the OSC if the RRT member agencies who have response authority within the affected areas are unable to agree on the designation. The NRT shall designate the OSC if members of one RRT or two adjacent RRTs are unable to agree on the designation.

5.3.8 Worker health and safety. (a) Response actions under the NCP shall comply with the provisions for response action worker safety and health in 29 **CFR** 1910.120. The national response system meets the requirements of 29 **CFR** 1910.120 concerning use of an incident command system.

(b) In a response action taken by a responsible party, the responsible party must assure that an occupational safety and health program consistent with 29 **CFR** 1910.120 is made available for the **protection** of workers at the response site.

(c) In a response taken under the NCP by a lead **agency**, an occupational safety and health program should be made available for the **protection** of workers at the response site, consistent with, and to the extent required by, 29 **CFR** 1910.120. Contracts relating to a response action under the NCP should contain assurances that the contractor at the response site will comply with this program and with any applicable provisions of the Occupational Safety and Health Act of 1970 (OSH Act) and state laws with plans approved under section 18 of the OSH Act.

(d) When a state, or political subdivision of a state, without an OSHA-approved state plan is the lead **agency** for response, the state or political subdivision must comply with standards in 40 **CFR part** 311, promulgated by the EPA pursuant to section 126(f) of the Superfund Amendments and Reauthorization Act of 1986 (SARA).

(e) Requirements, standards, and regulations of the OSH Act and of state OSH laws not directly referenced in paragraphs (a) through (d) of this section, must be complied with where applicable. Federal OSH Act requirements include, among other things, Construction Standards (29 **CFR part** 1926), General Industry Standards (29 **CFR part** 1910), and the general duty requirement of section 5(a)(1) of the OSH Act (29 U.S.C. 654(a)(1)). No action by the lead **agency** with respect to response activities under the NCP constitutes an exercise of statutory authority within the meaning of section 4(b)(1) of the OSH Act. All governmental agencies and private employers are directly responsible for the health and safety of their own

employees.

5.4 Disposal

Oil recovered in cleanup operations shall be disposed of in accordance with the RCP, ACP, and any applicable laws, regulations, or requirements. RRT and ACP guidelines may identify the disposal plans to be followed during an oil spill response and may address: the sampling, testing, and classifying of recovered oil and oiled debris; the segregation and stockpiling of recovered oil and oiled debris; prior state disposal approvals and permits; and the routes, methods (e.g., recycle/reuse, on-site burning, incineration, landfilling, etc.); and sites for the disposal of collected oil, oiled debris, and animal carcasses.

5.5 Natural Resource Trustees

5.5.1 Damage assessment. (a) Upon notification or discovery of injury to, destruction of, loss of, or threat to natural resources, trustees may, pursuant to section 1006 of the OPA, take the following actions as appropriate:

- (1) Conduct a preliminary survey of the area affected by the discharge to determine if trust resources under their jurisdiction are, or potentially may be, affected;
- (2) Cooperate with the OSC in coordinating assessments, investigations, and planning;
- (3) Carry out damage assessments; or
- (4) Devise and carry out a plan for restoration, rehabilitation, replacement, or acquisition of equivalent natural resources. In assessing damages to natural resources, the federal, state, and Indian tribe trustees have the option of following the procedures for natural resource damage assessments located at 43 **CFR part 11**.

(b) Upon notification or discovery of injury to, destruction of, loss of, or loss of use of, natural resources, or the potential for such, resulting from a discharge of oil occurring after August 18, 1990, the trustees, pursuant to section 1006 of the OPA, are to take the following actions:

- (1) In accordance with OPA section 1006(c), determine the need for assessment of natural resource damages, collect data necessary for a potential damage assessment, and, where appropriate, assess damages to natural resources under their trusteeship; and
 - (2) As appropriate, and subject to the public participation requirements of OPA section 1006(c), develop and implement a plan for the restoration, rehabilitation, replacement, or acquisition of the equivalent, of the natural resources under their trusteeship.
- (c)(1) The trustees, consistent with procedures specified in the Fish and Wildlife and Sensitive Environments Annex to the Area Contingency Plan, shall provide timely advice on recommended actions concerning trustee resources that are potentially affected by a discharge of oil. This may include providing assistance to the OSC in identifying/recommending pre-approved response techniques and in predesignating shoreline types and areas in ACPs.

(2) The trustees shall assure, through the lead administrative trustee, that the OSC is informed of their activities regarding natural resource damage assessment that may affect response operations in order to assure coordination and minimize any interference with such operations. The trustees shall assure, through the lead administrative trustee, that all data from the natural resource damage assessment activities that may support more

effective operational decisions are provided in a timely manner to the OSC.

(3) The OSC deploys federal response resources, including but not limited to aircraft, vessels, and booms to contain and remove discharged oil. When circumstances permit, the OSC shall share the use of federal response resources with the trustees, providing trustee activities do not interfere with response actions. The lead administrative trustee facilitates effective and efficient communication between the OSC and the other trustees during response operations and is responsible for applying to the OSC for non-monetary federal response resources on behalf of all trustees. The lead administrative trustee is also responsible for applying to the National Pollution Funds Center for funding for initiation of damage assessment for injuries to natural resources.

(d) The authority of federal trustees includes, but is not limited to the following actions:

(1) Requesting that the Attorney General seek compensation from the responsible parties for the damages assessed and for the costs of an assessment and of restoration planning;

(2) Participating in negotiations between the United States and potentially responsible parties (PRPs) to obtain PRP-financed or PRP-conducted assessments and restorations for injured resources or **protection** for threatened resources and to agree to covenants not to sue, where appropriate; and

(3) Initiating damage assessments, as provided in OPA section 6002.

(e) Actions which may be taken by any trustee pursuant to section 311(f)(5) of the CWA or section 1006 of the OPA include, but are not limited to, any of the following:

(1) Requesting that an authorized **agency** issue an administrative order or pursue injunctive relief against the parties responsible for the discharge; or

(2) Requesting that the lead **agency** remove, or arrange for the removal of any oil from a contaminated medium pursuant to section 311 of the CWA.

5.5.2 Lead administrative trustee. The lead administrative trustee is a natural resource trustee who is designated on an incident-by-incident basis and chosen by the other trustees whose natural resources are affected by the incident. The lead administrative trustee facilitates effective and efficient communication between the OSC and the other trustees during response operations and is responsible for applying to the OSC for non-monetary federal response resources on behalf of all trustees. The lead administrative trustee is also responsible for applying to the National Pollution Funds Center for funding for initiation of damage assessment for injuries to natural resources.

5.5.3 OSC coordination. (a) The OSC shall ensure that the natural resource trustees are promptly notified in the event of any discharge of oil, to the maximum extent practicable, as provided in the Fish and Wildlife and Sensitive Environments Plan annex to the ACP for the area in which the discharge occurs. The OSC and the trustees shall coordinate assessments, evaluations, investigations, and planning with respect to appropriate removal actions. The OSC shall consult with the affected trustees on the appropriate removal action to be taken.

(b) The trustees will provide timely advice concerning recommended actions with regard to trustee resources that are potentially affected. This may include providing assistance to the OSC in identifying/recommending pre-approved response techniques,

and in predesignating shoreline types and areas in ACPs.

(c) The trustees also will assure that the OSC is informed of their activities regarding natural resource damage assessment that may affect response operations.

5.5.4 Dissemination of information. (a) When an incident occurs, it is imperative to give the public prompt, accurate information on the nature of the incident and the actions underway to mitigate the damage. OSCs and community relations personnel should ensure that all appropriate public and private interests are kept informed and that their concerns are considered throughout a response. They should coordinate with available public affairs/community relations resources to carry out this responsibility by establishing, as appropriate, a Joint Information Center bringing together resources from federal and state agencies and the responsible party.

(b) An on-scene news office may be established to coordinate media relations and to issue official federal information on an incident. Whenever possible, it will be headed by a representative of the lead **agency**. The OSC determines the location of the on-scene news office, but every effort should be made to locate it near the scene of the incident. If a participating **agency** believes public interest warrants the issuance of statements and an on-scene news office has not been established, the affected **agency** should recommend its establishment. All federal news releases or statements by participating agencies should be cleared through the OSC. Information dissemination relating to natural resource damage assessment activities shall be coordinated through the lead administrative trustee. The designated lead administrative trustee may assist the OSC by disseminating information on issues relating to damage assessment activities. Following termination of the removal activity, information dissemination on damage assessment activities shall be through the lead administrative trustee.

5.5.5 Responsibilities of trustees. (a) Where there are multiple trustees, because of coexisting or contiguous natural resources or concurrent jurisdictions, they should coordinate and cooperate in carrying out these responsibilities.

(b) Trustees are responsible for designating to the RRTs and the Area Committees, for inclusion in the RCP and the ACP, appropriate contacts to receive notifications from the OSCs of discharges.

(c) (1) Upon notification or discovery of injury to, destruction of, loss of, or threat to natural resources, trustees may, pursuant to section 311(f)(5) of the CWA, take the following or other actions as appropriate:

(A) Conduct a preliminary survey of the area affected by the discharge or release to determine if trust resources under their jurisdiction are, or potentially may be, affected;

(B) Cooperate with the OSC in coordinating assessments, investigations, and planning;

(C) Carry out damage assessments; or

(D) Devise and carry out a plan for restoration, rehabilitation, replacement, or acquisition of equivalent natural resources. In assessing damages to natural resources, the federal, state, and Indian tribe trustees have the option of following the procedures for natural resource damage assessments located at 43 **CFR part 11**.

(2) Upon notification or discovery of injury to, destruction of, loss of, or loss of use of, natural resources, or the potential for such, resulting from a discharge of oil occurring after August 18, 1990, the trustees, pursuant to section 1006 of the OPA, are to take the following actions:

(A) In accordance with OPA section 1006(c), determine the need for assessment of natural resource damages, collect data necessary for a potential damage assessment, and, where appropriate, assess damages to natural resources under their trusteeship; and

(B) As appropriate, and subject to the public participation requirements of OPA section 1006(c), develop and implement a plan for the restoration, rehabilitation, replacement, or acquisition of the equivalent, of the natural resources under their trusteeship;

(3)(A) The trustees, consistent with procedures specified in the Fish and Wildlife and Sensitive Environments Annex to the Area Contingency Plan, shall provide timely advice on recommended actions concerning trustee resources that are potentially affected by a discharge of oil. This may include providing assistance to the OSC in identifying/recommending pre-approved response techniques and in predesignating shoreline types and areas in ACPs.

(B) The trustees shall assure, through the lead administrative trustee, that the OSC is informed of their activities regarding natural resource damage assessment that may affect response operations in order to assure coordination and minimize any interference with such operations. The trustees shall assure, through the lead administrative trustee, that all data from the natural resource damage assessment activities that may support more effective operational decisions are provided in a timely manner to the OSC.

(C) When circumstances permit, the OSC shall share the use of federal response resources (including but not limited to aircraft, vessels, and booms to contain and remove discharged oil) with the trustees, providing trustee activities do not interfere with response actions. The lead administrative trustee facilitates effective and efficient communication between the OSC and the other trustees during response operations and is responsible for applying to the OSC for non-monetary federal response resources on behalf of all trustees. The lead administrative trustee also is responsible for applying to the National Pollution Funds Center for funding for initiation of damage assessment for injuries to natural resources.

(d) The authority of federal trustees includes, but is not limited to the following actions:

(1) Requesting that the Attorney General seek compensation from the responsible parties for the damages assessed and for the costs of an assessment and of restoration planning; and

(2) Initiating damage assessments, as provided in OPA section 6002.

(e) Actions which may be taken by any trustee pursuant to section 1006 of the OPA include, but are not limited to, any of the following:

(1) Requesting that an authorized **agency** issue an administrative order or pursue injunctive relief against the parties responsible for the discharge or release; or

(2) Requesting that the lead **agency** remove, or arrange for the removal of, or provide for remedial action with respect to, any oil from a contaminated medium pursuant to section 311 of CWA.

5.6 Oil spill liability trust fund.

5.6.1 Funding. (a) The OSLTF is available under certain circumstances to fund removal of oil performed under section 311 of the CWA. Those circumstances and the procedures for accessing the OSLTF are described in 33 **CFR** Subchapter M. The responsible party is liable for costs of federal removal and damages in accordance with

section 311(f) of the CWA, section 1002 of the OPA, and other federal laws.

(b) Response actions other than removal, such as scientific investigations not in support of removal actions or law enforcement, shall be provided by the **agency** with legal responsibility for those specific actions.

(c) The funding of a response to a discharge from a federally owned, operated, or supervised facility or vessel is the responsibility of the owning, operating, or supervising **agency** if it is a responsible party.

(d) The following agencies have funds available for certain discharge removal actions:

(1) DOD has two specific sources of funds that may be applicable to an oil discharge under appropriate circumstances. This does not consider military resources that might be made available under specific conditions.

(i) Funds required for removal of a sunken vessel or similar obstruction of navigation are available to the Corps of Engineers through Civil Works Appropriations, Operations and Maintenance, General.

(ii) The U.S. Navy (USN) may conduct salvage operations contingent on defense operational commitments, when funded by the requesting **agency**. Such funding may be requested on a direct cite basis.

(2) Pursuant to Title I of the OPA, the state or states affected by a discharge of oil may act where necessary to remove such discharge. Pursuant to 33 **CFR** subchapter M, states may be reimbursed from the OSLTF for the reasonable costs incurred in such a removal.

5.6.2 Claims. (a) Claims are authorized to be presented to the OSLTF under section 1013 of the OPA of 1990, for certain uncompensated removal costs or uncompensated damages resulting from the discharge, or substantial threat of discharge, of oil from a vessel or facility into or upon the navigable waters, adjoining shorelines, or exclusive economic zone of the United States.

(b) Anyone desiring to file a claim against the OSLTF may obtain general information on the procedure for filing a claim from the Director, National Pollution Funds Center, Suite 1000, 4200 Wilson Boulevard, Arlington, Virginia, 22203-1804, (703) 235-4756.

5.7 Documentation and Cost Recovery.

(a) All OSLTF users need to collect and maintain documentation to support all actions taken under the CWA. In general, documentation shall be sufficient to support full cost recovery for resources utilized and shall identify the source and circumstances of the incident, the responsible party or parties, and impacts and potential impacts to public health and welfare and the environment. Documentation procedures are contained in 33 **CFR** subchapter M.

(b) When appropriate, documentation shall also be collected for scientific understanding of the environment and for research and development of improved response methods and technology. Funding for these actions is restricted by section 6002 of the OPA.

(c) As requested by the NRT or RRT, the OSC shall submit to the NRT or RRT a complete report on the removal operation and the actions taken. The OSC report shall record the situation as it developed, the actions taken, the resources committed, and the problems encountered. The RRT shall review the OSC report with its comments or recommendations within 30 days after the RRT has received the OSC report.

(d) OSCs shall ensure the necessary collection and safeguarding of information, samples, and reports. Samples and information shall be gathered expeditiously during the response to ensure an accurate record of the impacts incurred. Documentation materials shall be made available to the trustees of affected natural resources. The OSC shall make available to the trustees of affected natural resources information and documentation in the OSC's possession that can assist the trustees in the determination of actual or potential natural resource injuries.

(e) Information and reports obtained by the EPA or USCG OSC shall be transmitted to the appropriate offices responsible for follow-up actions.

5.8 National response priorities

(a) Safety of human life must be given the top priority during every response action. This includes any search and rescue efforts in the general proximity of the discharge and the insurance of safety of response personnel.

(b) Stabilizing the situation to preclude the event from worsening is the next priority. All efforts must be focused on saving a vessel that has been involved in a grounding, collision, fire, or explosion, so that it does not compound the problem. Comparable measures should be taken to stabilize a situation involving a facility, pipeline, or other source of pollution. Stabilizing the situation includes securing the source of the spill and/or removing the remaining oil from the container (vessel, tank, or pipeline) to prevent additional oil spillage, to reduce the need for follow-up response action, and to minimize adverse impact to the environment.

(c) The response must use all necessary containment and removal tactics in a coordinated manner to ensure a timely, effective response that minimizes adverse impact to the environment.

(d) All parts of this national response strategy should be addressed concurrently, but safety and stabilization are the highest priorities. The OSC should not delay containment and removal decisions unnecessarily and should take actions to minimize adverse impact to the environment that begin as soon as a discharge occurs, as well as actions to minimize further adverse **environmental** impact from additional discharges.

(e) The priorities set forth in this section are broad in nature, and should not be interpreted to preclude the consideration of other priorities that may arise on a site-specific basis.

6.0 Response coordination

6.1 Nongovernmental participation. (a) Industry groups, academic organizations, and others are encouraged to commit resources for response operations. Specific commitments should be listed in the RCP and ACP. Those entities required to develop tank vessel and facility response plans under CWA section 311(j) must be able to respond to a worst case discharge to the maximum extent practicable, and should commit sufficient resources to implement other aspects of those plans.

(b) The technical and scientific information generated by the local community, along with information from federal, state, and local governments, should be used to assist the OSC in devising response strategies where effective standard techniques are unavailable. Such information and strategies will be incorporated

into the ACP, as appropriate. The SSC may act as liaison between the OSC and such interested organizations.

(c) ACPs shall establish procedures to allow for well organized, worthwhile, and safe use of volunteers, including compliance with requirements regarding worker health and safety. ACPs should provide for the direction of volunteers by the OSC or by other federal, state, or local officials knowledgeable in contingency operations and capable of providing leadership. ACPs also should identify specific areas in which volunteers can be used, such as beach surveillance, logistical support, and bird and wildlife treatment. Unless specifically requested by the OSC, volunteers generally should not be used for physical removal or remedial activities. If, in the judgment of the OSC, dangerous conditions exist, volunteers shall be restricted from on-scene operations.

(d) Nongovernmental participation must be in compliance with the requirements of subpart H of the NCP if any recovery of costs will be sought.

6.2 Natural resource trustees.

6.2.1 Federal agencies. (a) The President is required to designate in the NCP those federal officials who are to act on behalf of the public as trustees for natural resources. These designated federal officials shall act pursuant to section 1006 of the OPA. ``Natural resources'' means land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled (hereinafter referred to as ``managed or controlled'') by the United States, including the resources of the exclusive economic zone.

(b) The following individuals shall be the designated trustee(s) for general categories of natural resources, including their supporting ecosystems. They are authorized to act pursuant to section 1006 of the OPA when there is injury to, destruction of, loss of, or threat to natural resources, including their supporting ecosystems as a result of a discharge of oil. Notwithstanding the other designations in this section, the Secretaries of Commerce and the Interior shall act as trustees of those resources subject to their respective management or control.

(1) The Secretary of Commerce shall act as trustee for natural resources managed or controlled by DOC and for natural resources managed or controlled by other federal agencies and that are found in, under, or using waters navigable by deep draft vessels, tidally influenced waters or waters of the contiguous zone, the exclusive economic zone, and the outer continental shelf. However, before the Secretary takes an action with respect to an affected resource under the management or control of another federal **agency**, he shall, whenever practicable, seek to obtain concurrence of that other federal **agency**. Examples of the Secretary's trusteeship include the following natural resources and their supporting ecosystems: marine fishery resources; anadromous fish; endangered species and marine mammals; and the resources of National Marine Sanctuaries and National Estuarine Research Reserves.

(2) The Secretary of the Interior shall act as trustee for natural resources managed or controlled by DOI. Examples of the Secretary's trusteeship include the following natural resources and their supporting ecosystems: migratory birds; anadromous fish; endangered species and marine mammals; federally owned minerals; and certain federally managed water resources. The Secretary of the

Interior shall also be trustee for those natural resources for which an Indian tribe would otherwise act as trustee in those cases where the United States acts on behalf of the Indian tribe.

(3) Secretary for the land managing **agency**. For natural resources located on, over, or under land administered by the United States, the trustee shall be the head of the department in which the land managing **agency** is found. The trustees for the principal federal land managing agencies are the Secretaries of DOI, USDA, DOD, and DOE.

(4) Head of Authorized Agencies. For natural resources located within the United States but not otherwise described in this section, the trustee is the head of the federal **agency** or agencies authorized to manage or control those resources.

6.2.2 State. (a) State trustees shall act on behalf of the public as trustees for natural resources, including their supporting ecosystems, within the boundary of a state or belonging to, managed by, controlled by, or appertaining to such state. For the purposes of section 6.1, the definition of the term ``state'' does not include Indian tribes.

(b) The Governor of a state is encouraged to designate a lead state trustee to coordinate all state trustee responsibilities with other trustee agencies and with response activities of the RRT and OSC. The state's lead trustee would designate a representative to serve as a contact with the OSC. This individual should have ready access to appropriate state officials with **environmental protection**, emergency response, and natural resource responsibilities. The EPA Administrator or USCG Commandant or their designees may appoint the lead state trustee as a member of the Area Committee. Response strategies should be coordinated between the state and other trustees and the OSC for specific natural resource locations in an inland or coastal zone, and should be included in the Fish and Wildlife and Sensitive Environments Plan annex of the ACP.

6.2.3 Indian tribes. The tribal chairmen (or heads of the governing bodies) of Indian tribes, as defined in section 1.5, or a person designated by the tribal officials, shall act on behalf of the Indian tribes as trustees for the natural resources, including their supporting ecosystems, belonging to, managed by, controlled by, or appertaining to such Indian tribe, or held in trust for the benefit of such Indian tribe, or belonging to a member of such Indian tribe, if such resources are subject to a trust restriction on alienation. When the tribal chairman or head of the tribal governing body designates another person as trustee, the tribal chairman or head of the tribal governing body shall notify the President of such designation.

6.2.4 Foreign trustees. Pursuant to section 1006 of the OPA, foreign trustees shall act on behalf of the head of a foreign government as trustees for natural resources belonging to, managed by, controlled by, or appertaining to such foreign government.

6.3 Federal agencies.

(a) Federal agencies listed in this appendix have duties established by statute, executive order, or Presidential directive which may apply to federal response actions following, or in prevention of, the discharge of oil. Some of these agencies also have duties relating to the restoration, rehabilitation, replacement, or acquisition of equivalent natural resources injured or lost as a result of such discharge. The NRT, RRT, and Area Committee organizational structure, and the NCP, RCPs, and ACPs

provide for agencies to coordinate with each other in carrying out these duties.

(b) Federal agencies may be called upon by an OSC during response planning and implementation to provide assistance in their respective areas of expertise, consistent with the agencies' capabilities and authorities.

(c) In addition to their general responsibilities, federal agencies should:

(1) Make necessary information available to the Secretary of the NRT, RRTs, Area Committees, and OSCs;

(2) Provide representatives to the NRT and RRTs and otherwise assist RRTs and OSCs, as necessary, in formulating RCPs and ACPs; and

(3) Inform the NRT, RRTs, and Area Committees consistent with national security considerations, of changes in the availability of resources that would affect the operations implemented under the NCP.

(d) All federal agencies must report discharges of oil, as required in **40 CFR part** 110, from vessels or facilities under their jurisdiction or control to the NRC.

6.4 Other Federal agencies.

6.4.1 Department of Commerce. (a) The DOC, through NOAA, provides scientific support for response and contingency planning in coastal and marine areas, including assessments of the hazards that may be involved, predictions of movement and dispersion of oil through trajectory modeling, and information on the sensitivity of coastal environments to oil and associated cleanup and mitigation methods; provides expertise on living marine resources and their habitats, including endangered species, marine mammals and National Marine Sanctuary ecosystems; and provides information on actual and predicted meteorological, hydrological, ice, and oceanographic conditions for marine, coastal, and inland waters, and tide and circulation data for coastal and territorial waters and for the Great Lakes. In addition to this expertise, NOAA provides SSCs in the coastal zone, as described under section 3.3.3 of this appendix, Special teams.

6.4.2 Department of Justice. The DOJ can provide expert advice on complicated legal questions arising from discharges, and federal **agency** responses. In addition, the DOJ represents the federal government, including its agencies, in litigation relating to such discharges. Other legal issues or questions shall be directed to the federal **agency** counsel for the **agency** providing the OSC for the response.

6.4.3 Department of Defense. The DOD has responsibility to take all action necessary with respect to discharges where either the discharge is on, or the sole source of a discharge is from, any facility or vessel under the jurisdiction, custody, or control of DOD. In addition to those capabilities provided by SUPSALV, DOD may also, consistent with its operational requirements and upon request of the OSC, provide locally deployed USN oil spill response equipment and provide assistance to other federal agencies upon request. The following two branches of DOD have particularly relevant expertise:

(a) The United States Army Corps of Engineers has specialized equipment and personnel for maintaining navigation channels, for removing navigation obstructions, for accomplishing structural repairs, and for performing maintenance to hydropower electric

generating equipment. The Corps can also provide design services, perform construction, and provide contract writing and contract administrative services for other federal agencies.

(b) The U.S. Navy Supervisor of Salvage (SUPSLAV) is the branch of the service within DOD most knowledgeable and experienced in ship salvage, shipboard damage control, and diving. The USN has an extensive array of specialized equipment and personnel available for use in these areas as well as specialized containment, collection, and removal equipment specifically designed for salvage-related and open-sea pollution incidents.

6.4.4 Department of Health and Human Services. (a) The HHS assists with the assessment, preservation, and **protection** of human health and helps ensure the availability of essential human services. HHS provides technical and nontechnical assistance in the form of advice, guidance, and resources to other federal agencies as well as state and local governments.

(b) The principal HHS response comes from the U.S. Public Health Service and is coordinated from the Office of the Assistant Secretary for Health, and various Public Health Service regional offices. Within the Public Health Service, the primary response to a hazardous materials emergency comes from the **Agency** for Toxic Substances and Disease Registry (ATSDR) and the Centers for Disease Control (CDC). Both ATSDR and CDC have a 24-hour emergency response capability wherein scientific and technical personnel are available to provide technical assistance to the lead federal **agency** and state and local response agencies on human health threat assessment and analysis, and exposure prevention and mitigation. Such assistance is used for situations requiring evacuation of affected areas, human exposure to hazardous materials, and technical advice on mitigation and prevention. CDC takes the lead during petroleum releases regulated under the CWA and OPA while ATSDR takes the lead during chemical releases under CERCLA. Both agencies are mutually supportive.

(c) Other Public Health Service agencies involved in support during hazardous materials incidents either directly or through ATSDR/CDC include the Food and Drug Administration, the Health Resources and Services Administration, the Indian Health Service, and the National Institutes of Health.

(d) Statutory authority for HHS/National Institutes for **Environmental** Health Sciences (NIEHS) involvement in hazardous materials accident prevention is non-regulatory in nature and focused on two primary areas for preventing community and worker exposure to hazardous materials releases: (1) worker safety training and (2) basic research activities. Under section 126 of the SARA, NIEHS is given statutory authority for supporting development of curricula and model training programs for waste workers and chemical emergency responders. Under section 118(b) of the Hazardous Materials Transportation and Uniform Safety Act, NIEHS also administers the Hazmat Employee Training Program to prepare curricula and training for hazardous materials transportation workers. In the basic research arena, NIEHS is authorized under section 311 of SARA to conduct a hazardous substance basic research and training program to evaluate toxic effects and assess human health risks from accidental releases of hazardous materials. Under Title IX, section 901(h) of the Clean Air Act Amendments, NIEHS also is authorized to conduct basic research on air pollutants, as well as train physicians in **environmental** health. Federal research and training in hazardous materials release prevention represents an important non-regulatory activity and supplements ongoing private

sector programs.

6.4.5 Department of the Interior. The DOI may be contacted through Regional **Environmental** Officers, who are the designated members of RRTs. Department land managers have jurisdiction over the national park system, national wildlife refuges and fish hatcheries, the public lands, and certain water projects in western states. In addition, bureaus and offices have relevant expertise as follows:

(a) United States Fish and Wildlife Service and other Bureaus: Anadromous and certain other fishes and wildlife, including endangered and threatened species, migratory birds, and certain marine mammals; waters and wetlands; and effects on natural resources.

(b) The National Biological Survey performs research in support of biological resource management; inventories, monitors, and reports on the status and trends in the Nation's biotic resources; and transfers the information gained in research and monitoring to resource managers and others concerned with the care, use, and conservation of the Nation's natural resources. The National Biological Survey has laboratory/research facilities.

(c) Geological Survey: Geology, hydrology (ground water and surface water), and natural hazards.

(d) Bureau of Land Management: Minerals, soils, vegetation, wildlife, habitat, archaeology, and wilderness.

(e) Minerals Management Service: Oversight of offshore oil and gas exploration and production facilities and associated pipeline facilities under the Outer Continental Shelf Lands Act and the CWA; oil spill response technology research; and establishing oil discharge contingency planning requirements for offshore facilities.

(f) Bureau of Mines: Analysis and identification of inorganic hazardous substances and technical expertise in metals and metallurgy relevant to site cleanup.

(g) Office of Surface Mining: Coal mine wastes and land reclamation.

(h) National Park Service: General biological, natural, and cultural resource managers to evaluate, measure, monitor, and contain threats to park system lands and resources; archaeological and historical expertise in **protection**, preservation, evaluation, impact mitigation, and restoration of cultural resources; emergency personnel.

(i) Bureau of Reclamation: Operation and maintenance of water projects in the West; engineering and hydrology; and reservoirs.

(j) Bureau of Indian Affairs: Coordination of activities affecting Indian lands; assistance in identifying Indian tribal government officials.

(k) Office of Territorial Affairs: Assistance in implementing the NCP in American Samoa, Guam, the Pacific Island Governments, the Northern Mariana Islands, and the Virgin Islands.

6.4.6 Department of Justice. The DOJ can provide expert advice on complicated legal questions arising from discharges, and federal **agency** responses. In addition, the DOJ represents the federal government, including its agencies, in litigation relating to such discharges. Other legal issues or questions shall be directed to the federal **agency** counsel for the **agency** providing the OSC for the response.

6.4.7 Department of Labor. The DOL, through OSHA and the states operating plans approved under section 18 of the OSH Act, has authority to conduct safety and health inspections of hazardous waste sites to assure that employees are being protected and to determine if the site is in compliance with:

(a) Safety and health standards and regulations promulgated by OSHA (or the states) in accordance with section 126 of SARA and all other applicable standards; and

(b) Regulations promulgated under the OSH Act and its general duty clause. OSHA inspections may be self-generated, consistent with its program operations and objectives, or may be conducted in response to requests from EPA or another lead **agency**, or in response to accidents or employee complaints. On request, OSHA shall provide advice and consultation to EPA and other NRT/RRT agencies as well as to the OSC regarding hazards to persons engaged in response activities. OSHA may also take any other action necessary to assure that employees are properly protected at such response activities. Any questions about occupational safety and health at these sites may be referred to the OSHA Regional Office.

6.4.8 Federal Emergency Management **Agency**. FEMA provides guidance, policy and program advice, and technical assistance in hazardous materials, chemical, and radiological emergency preparedness activities (including planning, training, and exercising). FEMA's primary point of contact for administering financial and technical assistance to state and local governments to support their efforts to develop and maintain an effective emergency management and response capability is the Preparedness, Training, and Exercises Directorate.

6.4.9 Department of Energy. The DOE generally provides designated OSCs that are responsible for taking all response actions with respect to releases where either the release is on, or the sole source of the release is from, any facility or vessel under its jurisdiction, custody, or control, including vessels bareboat-chartered and operated. In addition, under the FRERP, DOE provides advice and assistance to other OSCs/RPMs for emergency actions essential for the control of immediate radiological hazards. Incidents that qualify for DOE radiological advice and assistance are those believed to involve source, by-product, or special nuclear material or other ionizing radiation sources, including radium, and other naturally occurring radionuclides, as well as particle accelerators. Assistance is available through direct contact with the appropriate DOE Radiological Assistance Program Regional Office.

6.4.10 Department of State. The DOS will lead in the development of international joint contingency plans. It will also help to coordinate an international response when discharges or releases cross international boundaries or involve foreign flag vessels. Additionally, DOS will coordinate requests for assistance from foreign governments and U.S. proposals for conducting research at incidents that occur in waters of other countries.

6.4.11 General Services Administration. The GSA provides logistic and telecommunications support to federal agencies. During an emergency situation, GSA quickly responds to aid state and local governments as directed by other Federal Agencies. The type of support provided might include leasing and furnishing office space, setting up telecommunications and transportation services, and advisory assistance.

6.4.12 Department of Transportation. DOT provides response expertise pertaining to transportation of oil by all modes of transportation. DOT, through RSPA, establishes oil discharge contingency planning requirements for pipelines, transport by rail and containers or bulk transport of oil.

6.5 States and local participation in response.

(a) Each state Governor is requested to designate one state office/representative to represent the state on the appropriate RRT. The state's office/representative may participate fully in all activities of the appropriate RRT. Each state Governor is also requested to designate a lead state **agency** that shall direct state-lead response operations. This **agency** is responsible for designating the OSC for state-lead response actions, and coordinating/communicating with any other state agencies, as appropriate. Local governments are invited to participate in activities on the appropriate RRT as may be provided by state law or arranged by the state's representative. Indian tribes wishing to participate should assign one person or office to represent the tribal government on the appropriate RRT.

(b) Appropriate state and local officials (including Indian tribes) shall participate as **part** of the response structure as provided in the ACP.

(c) In addition to meeting the requirements for local emergency plans under SARA section 303, state and local government agencies are encouraged to include contingency planning for responses, consistent with the NCP, RCP, and ACP in all emergency and disaster planning.

(d) For facilities not addressed under the CWA for oil discharges, states are encouraged to undertake response actions themselves or to use their authorities to compel potentially responsible parties to undertake response actions.

(e) Because state and local public safety organizations would normally be the first government representatives at the scene of a discharge or release, they are expected to initiate public safety measures that are necessary to protect the public health and welfare and that are consistent with containment and cleanup requirements in the NCP, and are responsible for directing evacuations pursuant to existing state or local procedures.